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MIGRANT

A QUARTERLY JOURNAL
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Published by
THE TENNESSEE
ORNITHOLOGICAL
SOCIETY

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MARCH 1989
VOL. 60, NO. 1

THE MIGRANT

A QUARTERLY JOURNAL OF ORNITHOLOGY

FIRST PUBLISHED, JUNE 1930

PUBLISHED BY

THE TENNESSEE ORNITHOLOGICAL SOCIETY

Founded at Nashville, Tenn., 7 October 1915

A non-profit, educational, scientific, and conservation organization.

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Annual dues, $10.00; Sustaining, $20.00; Life, $200.00; Student (under 18 years), $5.00; Family, $12.00; (chapters may collect additional fees to cover local expenses). Dues, contributions, and bequests are deductible from Federal income and estate taxes. Back numbers may be had from Dr. James T. Tanner, 417 Switzerland Dr., Knoxville, Tenn. 37920. Correspond with the Treasurer for subscriptions, memberships, and changes of address.

Published quarterly (March, June, September, and December). Printed by Allen Press, Inc., Lawrence, Kansas. Mailed at Lawrence, KS.

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THE MIGRANT

Published by the Tennessee Ornithological Society,
to Record and Encourage the Study of Birds in Tennessee.
Issued in March, June, September, and December.

VOL. 60 MARCH 1989 NO. 1

The Migrant, 60(1):1–3, 1989

A CONCENTRATION OF BEWICK'S WRENS IN STEWART COUNTY, TENNESSEE

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Abstract.—During surveys of forest clear-cut areas in Stewart County, Tennessee, an unusually large concentration of 21 Bewick's Wrens (*Thryomanes bewickii*) was inadvertently discovered in July 1987. The wrens were found in habitat created by the forest clear-cut operations of a local timber company. Nineteen of 29 known clear-cut areas in Stewart County were surveyed between 15 July and 24 July 1987; Bewick's Wrens were present at eight of these sites.

When large areas of forest are clear-cut by timber companies and planted to pine or allowed to undergo natural succession, Bachman's Sparrows (*Aimophilia aestivalis*) will sometimes utilize the resultant habitat (Nicholson 1976). Several of these sparrows have been discovered in Giles, Lawrence, Lewis and Hardin Counties as a result of recent work by Damien Simbeck (Damien Simbeck, pers. comm.). While searching for Bachman's Sparrows in Wayne County, Tennessee, on 21 June 1987, Simbeck and I discovered three Bewick's Wrens (*Thryomanes bewickii*) in two different clear-cut areas. In Stewart County, I initiated a survey of Westvaco Timberlands Division (hereafter Westvaco) clear-cut areas to determine if Bachman's Sparrows were present. It was while I was conducting this survey that I inadvertently discovered a large concentration of Bewick's Wrens.

From 1984 to 1987, Westvaco created 29 clear-cut areas of varying size (ranging up to 30 ha) near Dover, Tennessee. All of the clear-cuts are south of Highway 79 and west of Highway 49. Most of these areas have been, or are being, planted to loblolly pine (*Pinus taeda*). The planned rotation period for these trees is 25–30 years (Steve Morgan, pers. comm.).

During the clear-cut operation, the existing marketable hardwood trees are harvested and then one of two methods is used to prepare the area for the planting of the pine seedlings. One technique, called "mechanical site preparation," involves the use of a large tractor with a V-blade to shear the smaller hardwood trees off at the stumps to prevent sprouting. A second tractor then rakes the resulting debris into long windrows or slash piles. On some occasions the ground is also disked to promote better seedling growth.

The second technique, called "non-mechanical site preparation," is especially useful on steep areas where tractors cannot operate safely. A herbicide is used to

kill the hardwood competition and a controlled burn is often utilized to enhance the effect of the herbicide treatment (Steve Morgan, pers. comm.).

I conducted field surveys on 19 clear-cuts in Stewart County in June and July 1987. Total time spent in the field was 24 hours. On 23 and 27 June I surveyed old field areas east of Highway 49, but I did not find any Bewick's Wrens. On the first day that I surveyed a Westvaco clear-cut area, 15 July, I discovered Bewick's Wrens. Twenty-one wrens were found as follows: three on 15 July; three on 17 July; four, including a recently fledged young, on 18 July; one on 21 July; none on 22 July; and 10 on 24 July. Wrens were found in eight of the 19 clear-cut areas. Of note also was the discovery of two singing Bachman's Sparrows on a clear-cut in western Stewart County on 21 July 1987.

Most of the wrens were discovered after they began scolding and their distinctive call notes attracted my attention. However, some wrens simply flew out in front of me as I walked by a slash pile. Most of the wrens occurred in slash piles that were from one to three years old, but a few wrens were found in slash piles that were less than 12 months old. One Bewick's Wren at a Wayne County site occurred in a clear-cut that was very dense and more than three years old. The vegetation surrounding the slash piles varied from none at all to a composite of young pine trees up to 2 m tall with scattered grasses, forbs, brier thickets and deciduous saplings. The slash piles themselves ranged in height up to 4 or 5 m and were very dense.

It must be emphasized that the discovery of this large concentration of wrens in Stewart County was initially a fortuitous by-product of a Bachman's Sparrow search. By 21 July 1987, I had visited at least once all of the clear-cuts I had planned to census. Realizing that the presence of Bewick's Wrens in the clear-cut areas was most probably underestimated, I returned to three clear-cut areas on 24 July to search for this species. These clear-cuts had previously received only a superficial search because they were successionally too young to support the proper habitat for Bachman's Sparrow. Utilizing a taped recording of the Bewick's Wren song, I was able to locate 10 birds over a three hour period in these three clear-cuts. As a result, I believe the actual concentration of Bewick's Wrens in Stewart County during the summer of 1987 was probably much greater than what I have reported here.

The appearance of such a large number of Bewick's Wrens in clear-cut habitat represents an important, although not unexpected, discovery in Tennessee's ornithological history. Shrubby thickets are among the habitat types identified by Gorton (1977) as being used by Bewick's Wrens. In an Oregon study, Kroodsma (1973) found Bewick's Wrens in an open pasture with dense tangles of wild blackberry (*Rubus* sp.) and rose (*Rosa* sp.); the pasture was bordered by mixed stands of coniferous and deciduous trees with dense underbrush. An additional analysis by Kroodsma (op. cit.) of 28 Bewick's Wren territories in a riparian community revealed that the species preferred habitat characterized largely by oak or ash overstory with dense underbrush. Apparently the windrows or slash piles created during Westvaco's mechanical site preparation produce habitat which is analogous to the woody thickets frequently found in the western part of the species' range.

The Bewick's Wren is listed as a State Threatened species (Alsop 1980). Since 1972, the species has appeared on "The Blue List," published periodically in *American Birds* as an early warning system for species which are undergoing a substantial decline in numbers in all or a major part of their range (Tate 1986). The status of Bewick's Wrens throughout Tennessee needs to be closely evaluated. When sightings are made, notes should be taken on the exact location and habitat in which each bird is found. For sightings made during the nesting season, ob-

servers should be alert for the presence of positive breeding evidence as defined by Nicholson and Hamel (1986). The species has been found in a variety of urban, suburban and rural habitats including farms and homes with brush piles, shrubby thickets, stacks of chopped firewood, and deserted farm sheds. Look for Bewick's Wrens among the birds at your bird feeders as this species has overwintered in Tennessee.

While some clear-cut areas have been searched in the past (e.g., Williams 1974) many clear-cuts have received little attention. An intensive, coordinated study of these areas could lead to management recommendations for the Bewick's Wren, Bachman's Sparrow, or other species utilizing this habitat. Research studies addressing micro-habitat utilization, limiting environmental factors and important food items unique to selected target species could be initiated with the cooperation of the appropriate timber company. While not all timber companies operating in Tennessee use the same management practices, there should be a number of counties which currently have the habitat I have described in this paper.

LITERATURE CITED

Alsop, F. J., III. 1980. Birds. Pp. A-1–A-113 *in* D. C. Eagar and R. M. Hatcher (eds.). Tennessee's rare wildlife, volume I: the vertebrates. Tennessee Wildlife Resources Agency and Tennessee Conservation Department.

Gorton, R. E., Jr. 1977. Territorial interactions in sympatric Song Sparrow and Bewick's Wren populations. Auk 94:701–708.

Kroodsma, D. E. 1973. Coexistence of Bewick's Wrens and House Wrens in Oregon. Auk 90:341–352.

Nicholson, C. P. 1976. The Bachman's Sparrow in Tennessee. Migrant 47:53–60.

Nicholson, C. P., and P. B. Hamel. 1986. Tennessee breeding bird atlas handbook. Tn. Ornith. Soc. Nashville, TN. 25 pp.

Tate, J., Jr. 1986. The blue list for 1986. American Birds 40:227–236.

Williams, M. D. 1974. The season: Central Plateau and Basin Region. Migrant 45:101–102.

Accepted 18 April 1988.

The Migrant, 60(1):4, 1989

VERMILION FLYCATCHER IN UPPER EAST TENNESSEE

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While participating in the Elizabethton Fall Bird Count on 26 September 1987, Brian Cross and I found an immature male Vermilion Flycatcher (*Pyrocephalus rubinus*) at Austin Springs, Washington County, Tennessee. The bird was first sighted as it flew from a tree to a fence post about 15 m from us at 0930 EDT. The sky was clear and the sun was behind us as we studied the bird with 7 × 35 binoculars and a 20× spotting scope for over 30 minutes. The bird stayed along a short section of fence near the shoreline of the Watauga River prong of Boone Lake. It captured insects by typical aerial flycatching and by fluttering down to the ground to take prey from the short grass in the field.

The bird appeared slightly smaller than an Eastern Phoebe (*Sayornis phoebe*), which was verified later when a phoebe occasionally chased it. The Vermilion Flycatcher would pump its tail phoebe-like. This was a very distinctive bird. Its most obvious field mark was the bright red plumage of the underside, extending from the mid-breast to the undertail coverts. The throat and upper breast were light gray with scattered red flecks and the breast was lightly streaked with brown. The crown was dusky gray with red patches at the front and rear. A trace of the black mask could be seen. The back and wings were dusky gray-brown, and two faint pale wing bars were evident. The tail was short and blackish, the bill was small and black, and the eyes and feet were black. No vocalizations were heard.

The bird was present for three days, until 28 September. It remained in the same area near the shoreline, usually on either of two fences. Most perches were low and in the open. More than twenty people saw the bird and identifiable photographs were secured by the author.

I am aware of ten previous records of this southwestern species in Tennessee, all since 1960. Six of the records are from the Reelfoot Lake area of Lake and Obion Counties (Smith 1965, Hogg 1968, Leggett 1969). Single records exist for Shelby County (Waldron 1985), Lauderdale County (Patterson 1973), Dyer County (Patterson 1970), and Knox County (Owen 1965). All except the Knox County record were in or near the Mississippi River floodplain. There are two spring records, both in mid-May. The others range from 30 September to 27 December. Thus, the Vermilion Flycatcher record documented here is apparently the eleventh Tennessee record, only the second record away from the immediate Mississippi River area, and the earliest fall sighting by four days.

LITERATURE CITED

Hogg, G. E. 1968. Vermilion Flycatcher at Reelfoot. Migrant 39:12.
Leggett, K. 1969. Vermilion Flycatcher again recorded at Reelfoot. Migrant 40:17.
Owen, J. B. 1965. Vermilion Flycatcher in Knox County. Migrant 36:14–15.
Patterson, D. E. 1970. The Season: western coastal plain region. Migrant 41:68.
Patterson, D. E. 1973. The Season: western coastal plain region. Migrant 44:98–99.
Smith, A. I. 1965. Vermilion Flycatchers at Reelfoot Lake. Migrant 36:14.
Waldron, M. G. 1985. The Season: western coastal plain region. Migrant 56:47–49.

Accepted 28 February 1988.

The Migrant, 60(1):5–6, 1989

FIRST EVIDENCE OF NORTHERN SAW-WHET OWLS NESTING IN TENNESSEE

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J. B. Owen
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A pair of Northern Saw-whet Owls (*Aegolius acadicus*) apparently nested in Claibourne County, Tennessee, in the spring of 1988. On 8 May 1988 George W. McKinney discovered an immature Northern Saw-whet Owl about 3 m above the ground in a cluster of young maples near his home north of Speedwell in Claibourne County, about 56 km north of Knoxville. The site was at an elevation of approximately 375 m (1,200 feet) in a deciduous woodland that contained patches of pines. The young owl was chocolate brown with a buff belly and a conspicuous white "T" above its beak and over its eyes. McKinney returned to the site at dusk and after a while heard Saw-whet "too-too-too" notes. Soon an adult alighted within 3 m of him, and, possibly in response to the intrusion, made bill snapping sounds. A second adult appeared about 50 m away; an immature owl also appeared and after flying a short distance it showed its inexperience by almost falling off the branch on which it landed. From the sounds in the increasing darkness, McKinney thought there were two more immatures. The immature owl he saw had a tail slightly longer than its folded wings.

On 11 May McKinney found another immature Saw-whet in the same clump of maples; this owl's tail was noticeably shorter than its wings. Owen and McKinney later photographed the owl with 35 mm camera and color film. The owl was perched about 5 m above the ground. The positioning of a ladder and the removal of twigs in front of the owl did not cause it to flush; photographs were taken with the camera at eye level with the bird and about 2 m away. The entire visible portion of the eyes at close range seemed to be greenish brown. Neither of us saw any yellow in the eyes of the owl; McKinney did not see any yellow in the eyes of the first young owl.

McKinney found one pellet under the branch where the first immature had perched. He sent it to Dr. Paul Parmalee (Department of Anthropology, University of Tennessee, Knoxville) who found that it contained bones of one Masked Shrew (*Sorex cinereus*) and one Meadow Jumping Mouse (*Zapus hudsonius*).

There is no reference in *The Migrant* (1931–1987) or in Stupka (1963. Notes on the birds of Great Smoky Mountains National Park. Univ. Tennessee Press) to any nests or evidence of nesting (e.g., immatures with limited flying capability) of Saw-whet Owls ever being found in Tennessee. Of the 46 items about Saw-whet Owls in *The Migrant,* only two (both are one-time sightings from Nashville) are reports of adults seen during the breeding season away from the higher elevations of the Smokies or Roan Mountain. The lowest mountain elevation mentioned is 1,400 m (4,600 feet).

In *The Wilson Bulletin* (86:173–174, 1974) Simpson and Range mention four records of immature Saw-whet Owls in North Carolina, all of which were found at elevations above 1,585 m (5,200 feet). The four dates are 10 July, 1 September, 2 September, and 2 September. On 16 August 1985, Robert Collier (personal communication) with his family found two immature Saw-whet Owls together in a blueberry bush on Andrews Bald at an elevation of 1,786 m (5,860 feet) in

North Carolina. All of these dates are considerably later than our observations of the Claibourne County owls, and the elevations are 1,200 to 1,615 m (4,000 to 5,300 feet) higher. Perhaps field work in future years will provide a clue as to whether the Claibourne County Saw-whet Owls are part of an unknown Cumberland Mountain foothills population or a one-time, accidental occurrence.

Accepted 14 July 1988.

The Migrant, 60(1):6, 1989

BLACK SCOTERS AND WHITE-WINGED CROSSBILL IN MIDDLE TENNESSEE

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On 19 April 1985 at approximately 0945 along the Cumberland River near Wiley Springs Bay, Stewart County, Tennessee, I observed a flock of 20 Black Scoters (*Melanitta nigra*) in flight. I noticed that most of the birds had orange on the base of the upper mandible. A few birds were in female plumage with characteristic white cheeks. I saw no sign of a white patch on the wings. As the birds turned and changed positions, I could see the silver of the underwings as the sun hit them. At first, the birds flew in a loose flock; they then changed to a single file, flying low in a northwesterly direction along the Cumberland River. The birds were observed approximately 45 seconds. This sighting represents the only Stewart County record of Black Scoter and is also the highest one-day count recorded in Tennessee.

On 29 November 1977, while in my house in north Montgomery County, Tennessee, I observed a White-winged Crossbill (*Loxia leucoptera*) through a window. Approaching the window cautiously, I was able to stand as close as 1 m from the bird. Clearly visible were two white wing bars and crossed mandibles. Dorsally and ventrally, the body consisted of broken streaks of an orange-yellow color. The wings were black with two white wing bars. I observed the bird as it fed on cone seeds from two eastern hemlocks (*Tsuga canadensis*) for approximately 20 minutes. It then flew away, and I was unable to locate it again. This sighting represents the only one of this species in the Highland Rim and Basin Region of Tennessee. White-winged Crossbills were also present in Martin (28 November–2 December) and on Roan Mountain (2 January–15 March) during the winter of 1977–1978 (Alsop, Migrant 49:39–48, 1978).

Accepted 8 September 1988.

BOOK REVIEWS

The Migrant, 60(1):7, 1989

BIRDS AND BIRDING ON THE MISSISSIPPI COAST—by Judith A. Toups and Jerome A. Jackson, 1987. University Press of Mississippi, 3825 Ridgewood Road, Jackson, MS 39211. xvi + 303 pp., $17.95 plus $2 postage prepaid.

Lula and I have always been attracted to the Mississippi Gulf Coast. Our 1936 birding party camped for four days within sight of the water. The 1940 Memphis Sea Scout cruise down the Mississippi River ended in Mississippi Sound. The late Austin Burdick, Jr., Ben Welch, Jr. and I took a day off and hiked to Van Cleave, then back across the pine barrens. We were rewarded by seeing a Sandhill Crane. In October 1941, Lula and I worked the coast from Cameron Parish to Destin; north of Ocean Springs we found the Sandhill Cranes; we walked Deer Island with Tom Burleigh. Holiday train excursions ($10 round trip) from Memphis to Gulfport/New Orleans, often put us aboard an excursion boat to Ship Island. On one trip the late Wendell Whittemore and I slept on the sand and in the Lighthouse. The tourist boat failed to show the next day, so we had to hitch a ride on a boat to New Orleans. Other times we drove down; Interstate and 4-lane highways now make this trip shorter and easier. Accommodations in this longtime resort area are many and varied. What had been needed is such a book as this. Even if you are unable to visit the coast, get the book; it is interesting and enjoyable. If you go, you will find the book very informative and helpful: where to go, where you can find what, even help on planning a "Big Day." Bar graphs show seasonal probability. Detailed map sketches accompany the key places to bird, generally, or for special species. The black and white illustrations, by Dalton King, of 22 species and habitats add to the attractiveness of the book.

There have been many changes since our first visit. Intense development is inevitable in a resort and coastal area, but in other respects there has been improvement in birding opportunities. The Mississippi Sandhill Crane NWR, state parks, and wildlife management areas have been established. The Gulf Islands National Seashore, a wonderful project, gives protection to the important barrier islands, about ten miles out from the public beach, sea wall, and busy U.S. 90 highway. A beautifully located Visitor Center with camping facilities, self-guiding nature trails and more, is located on the mainland at Davis Bayou, southeast of Ocean Springs. Another change is the number of species present. The authors state that the coastal bird list has increased by 70 species since 1944. This, of course, includes rarities, but many can be found with the aid of this book. In 1936, I talked with an Englishman who was anxious to have the Starling appear at his rural home (he later had Sandhill Cranes often fly over). The Black-shouldered Kite (from south Texas) has nested in a coastal county for several years and the American Swallow-tailed Kite and Mississippi Kite are more common.

I cannot close without mentioning a conservation accomplishment of considerable magnitude. You can easily envision the difficulties of Least Terns nesting on a sandy beach used by thousands of tourists who have come for the purpose of using these beaches themselves. It was also necessary, after such tourist use, to maintain the beach with mechanical equipment. The senior author, her associates, and the Gulf Coast Aubudon Society have labored to secure the cooperation of the Harrison County supervisors, and, consequently, designated and posted areas are now available for the nesting of Least Terns on this beach. This is now, truly, the "Least Tern Capital of the World."—BEN B. COFFEY, JR., 672 N. Belvedere, Memphis, TN 38107.

The Migrant, 60(1):8, 1989

A Field Guide to Little-Known & Seldom-Seen Birds of North America—by Ben L. Sill, Cathryn P. Sill, and John C. Sill with illustrations by John Sill, 1988. Peachtree Publishers, Atlanta and Memphis, 82 pp., 32 color illustrations, softbound, $7.95.

We scientists take ourselves all too seriously. As amateur scientists, birders suffer some of the same malady, a seriousness that can be broken only when one of our cherished forms is used properly but for a humorous purpose. The devious authors of this little gem of a book have done just that. From a set of illustrations executed with John Sill's customary skill, the Sills (or is it Sillies?) weave an artful parody on the modern field guide. Complete with a glossary: "Coverts—not used in this guide since we don't know what it means," field notes: "Circle the right answer," and a comparison of the number of new bird species described to six candidate explanations, this guide has all the appropriate features. The authors describe the fieldmarks, behaviors, and range of 32 heretofore unknown species, and include observation hints, range maps, and specialized equipment needs (including serving suggestions) for observing these birds. Among the many interesting forms are the American Bunting, *Patrioticus americanus,* the Gila Gull, *Larus precipitatus,* and the Texas Warbler, *Dendroica texana.* I heartily recommend this little book; the laughs are well worth the price. I might criticize the failure of their specific epithets to agree in gender with their generic names, and to be expressed in lower case, but that would be too serious!—Paul B. Hamel, Tennessee Department of Conservation, 701 Broadway, Nashville, TN 37219.

Received 8 December 1988.

The Migrant, 60(1):8–9, 1989

Annotated Checklist of the Birds of Kentucky—by Burt L. Monroe, Jr., Anne L. Stamm, and Brainard L. Palmer-Ball, Jr. 1988. Kentucky Ornithological Society, Louisville. 84 pp., maps, drawings. $6.00 ppd. from KOS, 9101 Spokane Way, Louisville, KY 40241.

This publication is the first detailed listing of Kentucky birds since Mengel's landmark *The Birds of Kentucky* was published in 1965. In the almost 30 years since the time Mengel completed his manuscript, our knowledge of Kentucky's avifauna, as expected, has greatly increased. This new information is nicely summarized here. The checklist consists of two parts, annotated species accounts, and bar graphs showing seasonal occurrence and abundance. The species accounts consist of a paragraph, of up to about 20 lines, for each species. These include descriptions of seasonal occurrence, habitat preferences, regional differences in occurrence or abundance, and typical numbers in which the species may be encountered. For species with fewer than 15 Kentucky occurrences, all records are listed with their sources. Nesting species, extinct or extirpated species, and species for which there are only documented sight records are clearly marked. Hypothetical species are in a separate listing. The bar graphs are easy to read, and a status

column allows quick determination of in which of four regions of the state a species occurs and/or breeds.

The checklist appears to be professionally produced, and I can find little to criticize. It will be of great value to all students of Kentucky, as well as Tennessee, ornithology, and I strongly recommend it.—Charles P. Nicholson, Box 402, Norris, TN 37828.

Received 26 January 1989.

The Migrant, 60(1):9, 1989

British Warblers—by Eric Simms. 1985. No. 71 in the New Naturalist Series, Collins, London. 432 pp., 6 color plates by Ian Wallace, drawings, maps, photos. $27.95, softbound.

Simms's stated goal in this book is to "assemble a great deal of material not previously brought together, to include much personal observation on behaviour and vocalizations, and to examine the different genera and individual species occurring in the British Isles" (p. 12). He admirably meets this goal in his coverage of the 8 genera and 45 species of Old World warblers (Sylviinae) occurring in the British Isles.

After introductory chapters which briefly discuss the evolutionary history, range, habitats and different genera of the group, Simms devotes a chapter to each of the British genera, followed by chapters on each of the members of the genus which breed in Britain. The species accounts quite adequately cover most aspects of the identification, range, ecology, behavior, breeding biology, and population trends. Many personal observations are included. Conservation is a strong theme, reiterated in a final chapter on "Past and Future," which soberly notes that woodland cover declined from about 50% two thousand years ago to 6% in 1970. This habitat loss has not been confined to woodlands, but has affected hedgerows, wetlands, and heath. Simms notes encouraging, recent conservation efforts.

The book is nicely illustrated, with range maps, black-and-white photographs of habitats and birds at the nest (by the renowned Eric Hosking), line drawings of displays, charts, and sonagraphs. The color plates, each of several species against a gray background, adequately show the diversity of size and plumage in the group, as well as the great plumage similarity of some species.

I greatly enjoyed this book. Simms covers his subject in detail, yet in a very accessible style. And his writing is often captivating: "To seek out the wetland warblers among the bending, hissing reeds and the clumps of thorny scrub, with the scent of damp rotting vegetation and black ooze in one's nostrils, is a rare experience indeed" (p. 33).—Charles P. Nicholson, Box 402, Norris, TN 37828.

Received 26 January 1989.

The Migrant, 60(1):10–12, 1989

MINUTES OF THE FALL 1988 TOS BOARD OF DIRECTORS MEETING AND SYMPOSIUM

The Tennessee Ornithological Society and the Alabama Ornithological Society met jointly at the Brandon Springs Group Camp facility in the Land-Between-the-Lakes Recreation Area, Stewart County, Tennessee, on 18–20 November 1988. Ninety-five persons registered for the meeting. The meeting consisted of a TOS Board of Directors meeting, symposium and field trips.

BOARD OF DIRECTORS MEETING

The Board of Directors meeting was called to order by President Dan Gray on 19 November. It was determined that a quorum was present. Copies of the minutes of the April 1988 meeting were distributed and approved as printed.

There were no reports from the VICE PRESIDENTS for East, Middle and West Tennessee. The DIRECTORS-AT-LARGE for East and West Tennessee were absent and sent no reports; the Middle Tennessee DIRECTOR-AT-LARGE had no report.

SECRETARY John Robinson reported that he would be resigning as Secretary after the Fall 1988 meeting because of a job transfer to northwest Wisconsin.

TREASURER George Payne reported that from 15 April to 15 November 1988, income was $3,170.80, expenses were $2,610.04 and capital reserve was $27,937.43. A detailed report was submitted.

CURATOR James Tanner was absent but President Gray reported that income from sale of back issues of *The Migrant* totalled $10.00; there were no additions to the archives.

EDITOR David Pitts reported that the March and June 1988 issues of *The Migrant* would be mailed as early as next week. He also stated that Allen Press, which only has two of the four colors currently used on the cover of *The Migrant,* had recommended that the Society publish its journal with the same color (green) on the cover of all four issues each year. George Mayfield moved that we retain the four colors that we now have, providing that the cost is not prohibitive, and that the final decision on the use of new colors be left to the Editor. Paul Hamel seconded the motion and it was approved.

David Pitts also reported that David Vogt has accepted the position of compiler of the Highland Rim and Basin Region section of "The Season" report. The former compiler for this region, Steve Stedman, was recognized by David Pitts as having done an excellent job in preparing well-written reports.

David Pitts stated that *The Migrant* will be copyrighted. He further reported that the printing of a membership list is overdue, and that Allen Press had recommended it be printed separately from *The Migrant.* George Mayfield suggested that the membership list be printed as a separate pamphlet or flyer having the same dimensions of a *Migrant* issue. Ken Dubke and Fred Carney cautioned against unauthorized use of the membership list by outside individuals, though such use of copyrighted material would be illegal.

David Pitts also reported that: the weight of the paper used to publish *The Migrant* will be slightly lighter; Society members should note how long it takes for the June 1988 *Migrant* issue to arrive from Lawrence, Kansas; and three volunteers will be needed for on-going projects. These projects include the organization and compilation of the annual Autumn Hawk Counts; the Eastern Mountain Region of "The Season" report; and the Winter Roadside Raptor Surveys formerly coordinated by Steve Stedman.

NOMINATING Committee Chairperson Ron Hoff reported that a new slate of officers would be elected in the spring of 1989, and requested that nominations be made soon. He also extended notes of thanks to John Robinson and Steve Stedman for their work as Secretary and President, respectively. A motion by Audrey Hoff to have President Gray select a new Secretary at his discretion was seconded and approved.

FINANCE Committee Chairperson Richard Taylor was absent and there was no report.

BREEDING BIRD ATLAS Chairperson Charles Nicholson reported that Atlas work in certain parts of the state is irregular and/or insufficient, and that a sixth year of field work may be necessary if the problem is not corrected. The Committee is currently enrolling authors to prepare the species accounts for the upcoming Atlas book. The University of Tennessee Press has expressed interest in publishing the book, although no commitment has been made. A Prospectus is currently being prepared. Finances from two Atlas fund-raising bird seed sales totalled approximately $300.00.

CERTIFICATION spokesperson Richard Knight reported that an addendum to the offical state list will appear in the March 1988 issue of *The Migrant.* He also presented an amended resolution (published in the *Tennessee Warbler,* Vol. 10, No. 2) which calls for several changes in the Committee, including the change of the Committee's name to the Tennessee Bird Records Committee. Charles Nicholson motioned to accept the resolution; this motion was seconded and approved.

CONSERVATION/EDUCATION Chairperson Ken Dubke reported that there were few additional reports of Common Barn-Owls resulting from the distribution of Barn-Owl posters across the state. The Chattanooga Chapter will be providing input to the management plan of the Prentice Cooper State Forest. A Resolution prepared by Chester McConnell of the Buffalo River TOS Chapter was presented. This resolution opposed additional channellization of the Obion/Forked Deer Rivers. A motion to accept this resolution was seconded and approved. Ken Dubke also reported that Gary Myers, Executive Director of the TWRA, is receptive to everything the TOS is doing.

The *Tennessee Warbler* EDITOR, the PATCHES AND DECALS Chairperson and the FALL SYMPOSIUM DIRECTOR were absent and there were no reports.

MEMBERSHIP Chairperson Audrey Hoff reported that 22 new memberships were received as a result of membership drive efforts earlier this year. A motion to allocate $150.00 for the printing of more TOS brochures was seconded and approved. The brochures are to be distributed to each Chapter for local distribution to potential new members.

PUBLICITY Chairperson Lil Dubke suggested that each Chapter should have notices about its meetings and activities in the local newspapers. She also presented an example of how the activities of a TOS Chapter can be given "front page" treatment in a newspaper.

RARE BIRD ALERT Chairperson David Chaffin was absent, but John Robinson stated that he had sent Mr. Chaffin a letter informing him that Mike Bierly was willing to use his hotline tape at The Wood Thrush Shop to report rare birds that are called in. A motion to utilize Mike Bierly's bird alert tape to report rare birds and to cancel the search for funds to support a new bird alert system was seconded and approved.

TENNESSEE ENVIRONMENTAL COUNCIL representative Ken Dubke moved that our membership in the TEC be renewed for one more year at a cost of $50.00. The motion was seconded and approved.

Under old business, George Payne presented a proposed 1989 budget by summarizing anticipated expenses and income; uncommitted funds were estimated at $2,850.00.

Under New Business, President Gray reported that Cleo Mayfield volunteered to accept the position of Secretary for the Society. John Robinson moved that compilers of "The Season" reports who receive photographs (of rare and common birds alike) submit such photographs to the Chairperson of the Tennessee Bird Records Committee after the issue of *The Migrant* in which the photographed record appears is published. The motion was seconded and was amended such that the location of where the photographs are to be stored is to be presented to the Board of Directors at the spring meeting. This amended motion was seconded and approved.

Martha Waldron reported that John Robinson has written a book entitled "The Birds of Tennessee" for which a publisher is currently being sought. A brief outline of the book was given and Martha moved that $1,000.00 be allocated to help defray the costs of publishing the book. During the ensuing discussion, some members expressed concern that many of the Directors had not had an opportunity to review the book. Support for the project was also expressed, and the motion was seconded and approved.

Robbie Hassler reported that she gave one of her hummingbird carvings to David Pitts, who obtained it by donating $100.00 to the Breeding Bird Atlas project.

Charles Nicholson moved that the TOS allocate $270.00 to reimburse regional coordinators of the Breeding Bird Atlas project and $375.00 to pay for the printing and distribution of the Atlas newsletter. The motion was seconded and approved.

A motion to approve the budget presented earlier by George Payne was seconded and approved. Following this item of business, the meeting was adjourned.

SYMPOSIUM

The program of the 1988 TOS Symposium was arranged by David H. Synder. Seven speakers made presentations; their names and topics follow.

Friday evening (18 November)

EFFECTS OF NON-POINT-SOURCE CONTAMINANTS ON AQUATIC ECOSYSTEMS, by Mack Finley (Austin Peay State University).

Saturday afternoon (19 November)

WHERE DO CERULEAN WARBLERS CHOOSE TO BREED?, by Paul Hamel.

THE PAST, PRESENT, AND FUTURE STATUS OF SANDHILL CRANES IN TENNESSEE, by Ken Dubke.

BREEDING DISTRIBUTION OF CEDAR WAXWINGS IN TENNESSEE, by Charles P. Nicholson.

EASTERN BLUEBIRD EGGSHELL CHARACTERISTICS, by David Pitts.

THE TENNESSEE BREEDING BIRD ATLAS PROJECT AFTER THREE FIELD SEASONS: A PROGRESS REPORT, by Charles P. Nicholson.

BREEDING BIRD FORAY FOR HANCOCK AND HAWKINS COUNTIES, by Rick Knight.

Saturday evening

EXPEDITIONS TO SOUTH AMERICA, A BIRDER'S PARADISE, by Mark Robbins (The Academy of Natural Sciences of Philadelphia).

John C. Robinson, Secretary

The Migrant, 60(1):13–23, 1989

THE 1988 CHRISTMAS BIRD COUNT

Damien J. Simbeck

Twenty-four counts were conducted in Tennessee during the 1988–89 season, with 137 species tallied and 2 others seen during the count period. As in the past few years, the counts were affected by the mild weather prior to the count season. A cold front just before the first counts left temperatures near freezing, especially in east Tennessee, but seemed to have little effect on the birds. Very few northern birds, such as Pine Siskin and Evening Grosbeak, were seen this year. Temperatures again went up during the second week, and dropped only slightly after another weak front after Christmas. This front brought snow into north-west Tennessee, and could perhaps explain the presence of American Tree Sparrows on three southern and eastern counts.

Overall, most rarities fell into the "lingering species" category, with a count first *Selasphorus* hummingbird most notable. This brings the state list to about 214 species for Christmas Bird Counts. This bird was one of at least 6 individuals reported in the state this winter. The Chattanooga bird was reported as a Rufous, which it most likely was, but details did not indicate that photographs had confirmed the identification. Many pictures have been taken of this bird, so a positive identification should be made.

Other notable lingering birds included Great Egret (15th record), a count week Cattle Egret, Osprey, Merlin (10th and 11th), Peregrine Falcon, Forster's Tern (3rd), House Wren, Orange-crowned Warbler (13th), Indigo Bunting (2nd), Lincoln's Sparrow, and Northern Oriole (10th). Also notable were Tundra Swan (13th), Short-eared Owl in good numbers on two counts, and, for the first time on a Tennessee count since 1958, Smith's Longspur.

As usual, the counts are tabulated from west to east.

INFORMATION ON THE COUNTS

MEMPHIS—18 Dec; 0630–1700; clear; temp. 22–50°F; wind SW 10–15 mph; 41 observers in 8–14 parties plus 2 at feeders; 128 party hours (97 on foot, 31 by car) plus 2 at feeders; 203 party miles (75 on foot, 128 by car). Good details submitted for Indigo Bunting (ER) and Smith's Longspurs (JW). 90 species, 33,745 individuals. Trish Ardovina, Dianne Bean, Buzz Bean, Claude Brown, Carolyn Bullock, Fred Carney, Robert Casey, Ben Coffey, Lula Coffey, Mike Collins, Chris Creech, Dollyann Daily, Helen Dinkelspiel, Fred Dixon, Pat Eddy, Harold Elphingstone, Robert Endres, James Ferguson, William Fowler, Lynn Gardler, Murray Gardler, Joe Guinn, Van Harris, Ginger Ilardi, Robert Ilardi, Jeanne Kirkpatrick, Jo Levy, Selma Lewis, Dwight Miller, George Payne, Rob Peeples, Dick Preston, Martha Ramey, Ernie Restivo, Virginia Reynolds, Arlo Smith, Noreen Smith, Richard Taylor, Phil Waldon, Martha Waldron (compiler—1626 Yorkshire Dr., Memphis 38119), Jeff Wilson.

REELFOOT—17 Dec; 0720–1600; 3 observers in 2 parties; no information on party hours. 69 species, 201,710 individuals. Don Doster, Joe Robb, Glenn Stanley.

SAVANNAH—23 Dec; partly cloudy with AM fog; temp. 51–66°F; wind light and var.; 4 observers in 3 parties; 31 party hours (12.75 on foot, 18.25 by car) plus 2 owling; 285.8 party miles (11 on foot, 274.8 by car) plus 20.7 owling. Good details submitted for Short-eared Owls (JP/DS), excellent details for Cattle Egret including photo (DS). 78 species, 3,050 individuals. Johnny Parks, Damien Sim-

TABLE 1.

Species	MEMP	REEL	SAVA	CCWR	BUFF	COLU	NASH	DRR	HICK	MURF	LEBA
Common Loon	—	—	11	1	—	—	—	—	38	—	—
Pied-billed Grebe	3	—	40	8	1	—	—	—	52	—	2
Horned Grebe	—	—	10	—	—	—	—	—	185	—	—
D-cr. Cormorant	—	—	—	1	—	—	—	—	1	—	—
Great Blue Heron	28	9	10	133	9	23	9	5	44	3	6
Great Egret	—	—	—	—	—	—	—	—	—	—	—
Cattle Egret	—	—	CW*	—	—	—	—	—	—	—	—
Bk-cr. Night-Heron	—	—	—	—	—	—	—	—	4	—	1
Tundra Swan	—	—	—	—	—	—	—	—	—	—	—
Gr. Wh.-fr. Goose	—	2	—	—	—	—	—	—	—	CW	—
Snow Goose	22s, 14b	90	—	2s	1b	5s	—	—	—	—	—
Canada Goose	14	40.4M	24	13.5M	129	639	245	25	1,142	152	158
Wood Duck	33	1,015	CW	41	—	11	—	4	2	3	1
Green-winged Teal	—	150	—	175	1	1	1	—	—	—	—
Am. Black Duck	1	2,000	1	12.2M	—	45	11	—	—	—	7
Mallard	330	130.2M	3	39.1M	15	379	19	3	334	15	62
Northern Pintail	—	—	—	369	—	—	—	—	—	—	5
Blue-winged Teal	—	200	—	—	—	—	—	—	—	—	—
Northern Shoveler	1	20	—	4	—	14	—	—	—	2	—
Gadwall	30	16.1M	—	395	—	31	50	—	CW	5	—
American Wigeon	—	4,100	2	910	CW	15	28	—	3	—	—
Canvasback	—	—	—	250	—	8	31	—	—	—	—
Redhead	—	—	—	3	—	4	—	—	1	—	—
Ring-necked Duck	27	5,000	—	1,800	—	71	76	—	2	—	25
Greater Scaup	—	—	—	—	—	—	—	—	—	—	—
Lesser Scaup	—	47	CW	27	1	17	175	—	40	—	—
Common Goldeneye	28	—	3	3	1	2	11	—	1	1	—
Bufflehead	—	200	2	14	—	—	110	—	7	—	—
Hooded Merganser	—	60	2	133	CW	34	—	—	CW	—	150
Comon Merganser	—	—	—	CW	—	—	—	—	—	—	—
R.-br. Merganser	—	—	—	4	—	1	—	—	42	—	—
Ruddy Duck	—	502	—	—	—	2	—	—	—	—	—
duck sp.	—	—	—	—	—	—	—	—	24	—	—
Black Vulture	—	—	—	9	53	28	18	463	2	55	19
Turkey Vulture	—	—	4	4	69	—	1	—	—	7	3
Osprey	—	—	—	—	—	—	—	—	—	—	—
Bald Eagle	—	16	1a	2a, 1i	—	—	—	—	—	—	—
Northern Harrier	11	1	11	4	5	5	3	4	—	3	—
Sharp-shinned Hawk	7	—	1	3	1	1	4	2	1	1	—
Cooper's Hawk	2	—	2	2	—	2	1	4	3	2	—
Accipiter sp.	—	—	—	1	1	—	1	—	—	—	2
Red-shouldered Hawk	2	4	3	10	3	—	—	—	2	—	—
Red-tailed Hawk	61	14	9	36	25	22	40	14	19	14	10
Rough-legged Hawk	—	—	—	CW	—	2	—	—	1*	—	—
Buteo sp.	—	—	—	—	—	—	1	—	—	—	—
Golden Eagle	—	—	—	—	—	—	—	—	—	—	—
American Kestrel	34	14	2	15	23	24	40	10	34	57	9
Merlin	—	—	—	—	1*	—	—	—	1*	—	—
Peregrine Falcon	—	—	—	—	—	—	—	—	—	—	—
Ruffed Grouse	—	—	—	—	—	—	—	—	—	—	—
Wild Turkey	4	—	—	CW	43	—	2	—	—	—	—
Northern Bobwhite	17	—	10	13	1	23	25	—	20	1	7
Virginia Rail	—	—	—	—	—	1	—	—	—	—	—
Sora	—	—	—	—	—	3	—	—	—	—	—
American Coot	46	50	269	6	1	—	—	—	247	—	7
Sandhill Crane	—	—	—	—	1*	—	—	—	—	—	—
Killdeer	173	13	3	29	53	8	39	6	100	97	19

TABLE 1. Extended.

HIGH	PICK	COOK	NICK	CHAT	HIWA	NORR	KNOX	GSMNP	GREE	KING	ELIZ	BRIS	ROAN
—	4	—	2	12	1	2	—	—	—	—	—	1	—
18	5	5	158	205	102	—	58	—	—	19	2	9	—
1	—	—	—	46	9	—	16	—	—	—	—	2	—
14	—	—	9	9	47	—	—	—	—	—	—	—	—
4	6	4	93	77	364	8	126	1	12	34	9	9	—
—	—	—	—	—	—	—	1*	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	10	3	—	10	—	—	—
—	—	—	—	—	1*	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—
3s	—	—	—	—	1b	—	1s	—	2s	—	—	—	—
907	—	115	23	38	1,407	213	327	—	304	432	93	101	—
—	—	—	9	30	6	3	1	2	9	8	—	—	—
—	—	—	—	—	101	—	—	—	—	—	1	1	—
5	31	2	1	38	393	4	20	—	67	9	3	12	—
241	14	9	133	436	1,237	60	87	14	225	506	114	140	—
—	—	—	—	—	63	—	—	—	1	10	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	4	14	—	—	—	—	—	—	—	—
3	—	1	331	120	163	—	6	—	2	26	—	1	—
7	—	—	11	75	82	—	—	—	—	—	4	3	—
3	10	—	29	8	11	—	—	—	—	—	—	—	—
1	—	—	—	3	1	—	—	—	—	—	—	—	—
12	35	23	98	26	22	—	25	—	—	10	5	14	—
—	—	2*	10	150	31	—	—	—	—	—	—	—	—
—	174	4	43	414	38	—	2	—	—	5	1	2	—
8	—	1	8	44	9	—	—	—	—	—	—	—	—
19	5	—	81	50	—	—	8	—	—	1	57	38	—
21	—	32	12	29	105	—	60	—	6	10	2	30	CW
—	—	—	—	1*	2*	—	—	—	—	—	—	—	—
—	—	—	—	1	—	—	1	—	—	—	—	—	—
—	—	—	40	7	4	1	1	—	—	—	—	1	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	21	—	—	1	12	—	—	—	2	36	—	24	—
—	3	12	2	5	27	—	2	—	19	13	—	6	—
—	1	—	—	—	—	—	—	—	—	—	—	—	—
1a	4a	—	1a, 2i	4a, 1i	4a, 5i	—	1a	—	—	—	1a	—	—
2	—	—	1	2	3	1	—	—	1	—	—	—	—
1	—	—	2	4	6	2	1	—	—	—	1	—	—
—	—	1	—	6	3	1	1	—	—	1	—	1	—
—	—	—	—	—	—	—	—	—	—	—	1	—	—
2	4	5	12	2	12	4	5	—	—	—	—	1	—
21	2	16	22	26	16	4	21	5	15	10	6	10	10
—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	1	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	1	—	—	—	—	—	—	—	—
26	8	21	15	25	21	6	25	7	30	23	19	22	1
—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	1*	—	—	—	—	—	—	—	—	—	—
—	—	1	—	—	—	—	—	3	—	—	1	—	2
—	—	1	—	—	—	—	—	—	—	—	—	—	—
4	12	1	12	20	15	—	—	—	24	—	—	1	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—
6	300	—	9,550	5,701	888	—	27	—	—	239	—	25	—
—	—	69*	—	—	26	—	—	—	—	—	—	—	—
2	—	42	4	126	287	9	159	18	43	36	14	10	—

TABLE 1. Continued.

Species	MEMP	REEL	SAVA	CCWR	BUFF	COLU	NASH	DRR	HICK	MURF	LEBA
Least Sandpiper	12	—	—	—	—	—	—	—	—	—	—
Dunlin	—	—	—	—	—	—	—	—	—	—	—
Common Snipe	6	—	—	24	8	1	15	8	13	1	—
American Woodcock	4	—	—	1	—	2	—	—	1	—	—
Bonaparte's Gull	1	35	1	215	—	—	—	—	—	—	—
Ring-billed Gull	925	—	124	260	—	3	4	—	878	—	44
Herring Gull	2	—	25	—	—	13	—	—	4	—	—
Forster's Tern	—	—	—	—	—	—	—	—	—	—	—
Rock Dove	641	2	120	25	99	19	138	24	375	46	39
Mourning Dove	328	11	123	173	215	146	363	63	491	89	46
Common Barn-Owl	—	—	—	—	—	—	—	—	—	—	1
E. Screech-Owl	—	—	6	1	4	7	5	7	4	—	3
Great Horned Owl	3	—	2	3	10	3	7	4	2	2	1
Barred Owl	2	1	3	3	3	4	1	—	4	—	5
Short-eared Owl	4	—	10*	—	—	—	—	—	—	—	—
Selasphorus sp.	—	—	—	—	—	—	—	—	—	—	—
Belted Kingfisher	10	2	3	23	19	13	18	1	26	2	5
Red-hd. Woodpecker	34	20	6	2	13	8	3	1	1	—	—
Red-bel. Woodpecker	126	23	15	49	53	32	121	13	24	7	6
Yel.-bel. Sapsucker	29	1	7	7	15	6	35	21	15	7	2
Downy Woodpecker	89	15	9	33	38	42	83	13	45	9	10
Hairy Woodpecker	11	3	1	11	19	6	19	2	5	2	3
Northern Flicker	164	18	26	38	43	15	68	8	44	16	7
Pileated Woodpecker	26	4	6	12	26	6	23	4	5	—	1
Eastern Phoebe	—	—	—	CW	9	1	2	1	—	1	—
Horned Lark	235	9	101	—	118	110	8	41	—	—	—
Blue Jay	353	17	50	146	128	48	206	23	108	35	25
American Crow	206	41	171	117	179	54	27.5M	34	253	211	37
Common Raven	—	—	—	—	—	—	—	—	—	—	—
Carolina Chickadee	216	57	40	95	168	93	352	56	125	40	20
Tufted Titmouse	124	22	20	70	139	72	231	36	66	29	19
Red-br. Nuthatch	—	—	—	1	—	1	—	—	—	—	—
White-br. Nuthatch	2	2	6	37	77	6	44	2	—	—	3
Brown-hd. Nuthatch	—	—	—	—	—	—	—	—	—	—	—
Brown Creeper	10	1	2	3	11	1	11	4	6	—	—
Carolina Wren	150	11	25	45	19	31	98	9	63	12	3
House Wren	4	—	—	1*	—	—	—	—	—	—	—
Winter Wren	11	2	1	3	5	4	—	1	2	—	—
Golden-cr. Kinglet	49	3	9	15	27	5	33	10	17	2	4
Ruby-cr. Kinglet	54	3	24	3	29	7	2	3	5	—	3
Eastern Bluebird	36	1	57	105	173	87	161	116	75	128	68
Hermit Thrush	13	3	13	9	7	10	13	18	12	—	4
American Robin	2,945	31	37	78	81	1,900	25.9M	870	8,761	1,661	204
Northern Mocking-bird	114	4	10	21	57	30	202	21	103	36	10
Brown Thrasher	22	4	1	5	5	1	5	—	3	—	1
Water Pipit	20	—	1	1	1	—	—	—	—	—	—
Cedar Waxwing	108	1	123	53	226	45	197	104	646	50	151
Loggerhead Shrike	24	5	2	5	27	6	29	9	5	8	—
European Starling	3,379	133	172	254	529	10M	9,045	175	8,351	6,000	1,556
Orange-cr. Warbler	—	—	—	—	—	—	—	—	—	—	—
Yel.-rumped Warbler	192	53	120	115	44	21	101	67	140	39	25
Pine Warbler	12	—	6	CW	1	—	—	—	—	—	—
Northern Cardinal	266	90	60	270	160	89	405	46	196	72	32
Indigo Bunting	1*	—	—	—	—	—	—	—	—	—	—
Rufous-s. Towhee	31	1	12	53	52	47	92	25	36	15	6
Am. Tree Sparrow	—	—	—	5	1*	—	—	—	—	—	—

TABLE 1. Extended.

HIGH	PICK	COOK	NICK	CHAT	HIWA	NORR	KNOX	GSMNP	GREE	KING	ELIZ	BRIS	ROAN
–	–	–	–	–	21	–	–	–	–	–	–	–	–
–	–	–	–	–	141	–	–	–	–	–	–	–	–
–	–	–	8	38	41	–	3	–	–	5	6	–	–
–	–	–	3	3	4	–	–	–	–	–	–	–	–
3	–	–	–	50	208	–	86	–	–	3	–	–	–
12	–	–	226	880	343	6	1,020	–	–	157	–	18	–
17	13	–	13	25	1	–	–	–	–	–	–	–	–
–	–	–	–	–	2*	–	–	–	–	–	–	–	–
40	–	67	125	431	37	88	718	33	252	1,217	176	66	33
172	117	255	239	304	418	122	879	434	333	300	198	252	10
–	–	–	–	–	–	–	–	–	–	–	–	–	–
–	–	2	13	5	7	6	5	3	2	1	12	4	7
1	CW	–	7	7	7	–	7	1	1	5	1	5	1
–	–	–	4	2	2	3	–	–	–	1	–	–	–
–	–	–	–	–	–	–	–	–	–	–	–	–	–
–	–	–	–	1*	–	–	–	–	–	–	–	–	–
9	–	–	38	31	34	4	38	9	4	32	4	7	5
2	9	2	1	3	2	–	–	–	–	1	–	–	–
17	6	27	43	44	55	15	61	16	55	15	10	12	1
2	4	5	31	18	25	10	24	8	8	4	13	2	1
13	11	20	50	38	62	14	55	27	47	36	54	17	15
4	2	3	3	11	20	6	11	20	5	10	4	1	1
25	18	13	73	59	76	14	42	17	18	27	16	11	1
4	10	8	29	7	21	5	15	16	14	24	12	7	3
–	3	3	9	2	18	1	8	6	3	1	6	2	1
–	–	–	39	–	–	–	–	–	15	–	–	–	–
155	96	166	201	121	273	51	340	128	258	157	200	117	36
409	60	284	1,395	622	820	240	1,051	117	941	279	675	533	221
–	–	–	–	–	–	–	–	6	–	–	6	–	6
14	9	52	209	224	199	100	339	204*	208	231	124	116	70
20	10	37	169	82	132	40	165	75	136	152	81	97	30
1	–	–	–	–	1	–	–	9	1	3	1	–	CW
7	7	21	28	29	19	38	27	37	22	43	18	18	20
–	–	–	–	14	8	–	–	–	–	–	–	–	–
1	–	3	19	11	24	1	10	16	2	3	2	–	4
7	6	14	90	51	97	33	123	46	84	36	31	23	21
–	–	–	–	–	–	–	–	–	–	–	–	–	–
–	–	7	12	4	17	5	8	11	6	–	3	–	1
5	–	3	104	49	110	77	117	162	26	5	35	27	18
–	–	–	76	25	58	2	18	13	6	1	3	2	–
80	56	88	189	133	253	91	171	39	33	5	67	73	15
2	1	8	32	26	50	17	20	6	1	2	6	1	2
70	63	328	79.6M	353	756	51	648	114	113	152	528	82	1
89	7	34	69	87	73	14	212	16	73	47	27	70	7
6	1	3	17	11	15	2	7	–	–	1	–	–	–
–	–	–	–	1	26	–	1	–	–	–	–	–	–
37	297	248	553	607	1,406	128	234	163	53	120	108	199	–
10	–	9	1	1	18	1	4	1	5	–	1	5	–
1,144	64	10.4M	942	2,106	3,764	654	14M	273	2,990	1,959	1,116	1,478	125
–	–	–	–	1*	–	–	–	–	–	–	–	–	–
4	21	25	167	171	462	229	267	18	77	79	37	5	–
–	–	–	6	26	25	–	1	2	2	–	–	–	–
95	13	112	213	234	163	87	273	66	164	151	120	98	41
–	–	–	–	–	–	–	–	–	–	–	–	–	–
6	2	19	79	80	57	18	42	15	7	8	12	2	6
–	–	–	1*	–	1*	–	–	–	–	–	–	–	–

TABLE 1. Continued.

Species	MEMP	REEL	SAVA	CCWR	BUFF	COLU	NASH	DRR	HICK	MURF	LEBA
Chipping Sparrow	—	—	—	—	—	—	—	—	—	—	1
Field Sparrow	39	4	45	39	198	76	44	43	44	27	9
Vesper Sparrow	2	—	2	—	2	—	1*	—	—	—	—
Savannah Sparrow	71	—	132	8	30	—	15	1	2	—	—
LeConte's Sparrow	—	—	10	—	—	—	—	—	—	—	—
Fox Sparrow	57	—	11	11	5	—	1	20	7	1	—
Song Sparrow	234	7	107	198	177	60	129	34	416	10	13
Lincoln's Sparrow	—	—	—	—	1*	—	—	—	—	—	—
Swamp Sparrow	128	4	27	123	23	57	4	13	73	6	1
White-th. Sparrow	1,086	45	138	305	293	80	483	16	373	14	22
White-cr. Sparrow	54	—	8	10	27	34	51	15	20	10	2
Dark-eyed Junco	241	30	118	304	474	60	140	116	138	46	22
Lapland Longspur	3	—	—	—	—	—	—	—	—	—	—
Smith's Longspur	2*	—	—	—	—	—	—	—	—	—	—
Red-wng. Blackbird	11.7M	104	200	13.8M	100	700	116	35	1,226	600	133
Eastern Meadowlark	243	26	123	137	135	40	157	31	30	72	2
Rusty Blackbird	184	25	50	3	1	—	—	—	35	180	—
Brewer's Blackbird	1	—	CW	—	13	—	—	—	—	—	—
Common Grackle	6,029	535	—	664	43	5,000	561	250	21	7,000	13
Brown-hd. Cowbird	1,012	—	—	436	343	3,000	95	38	805	153	29
blackbird sp.	—	—	—	500	—	—	75	—	30	—	—
Northern Oriole	—	—	—	—	—	—	—	—	—	—	—
Purple Finch	13	—	—	13	64	45	25	23	2	16	1
House Finch	49	—	—	73	11	124	186	58	147	90	149
Red Crossbill	—	—	—	—	—	—	—	—	—	—	—
Pine Siskin	1	—	—	2	—	1	—	—	—	—	—
American Goldfinch	89	1	47	225	234	90	157	44	46	39	22
Evening Grosbeak	8	—	—	—	2	—	—	—	—	—	—
House Sparrow	596	93	49	50	375	58	59	75	68	74	22
Total Species	90	69	78	94	82	86	76	61	81	58	65

M = 1,000. * = See information on the counts. Underlined numbers tie or exceed record highs.
CW = observed during count week.

beck (compiler—Dept. of Zoology, University of Tennessee, Knoxville 37996), Chris Sloan, Ann Tarbell.

CROSS CREEKS NWR—18 Dec; 0500–1700; clear; temp. 16–47°F; wind SW 5–15 mph; 10 observers in 6 parties plus 2 at feeders; 50 party hours (17 on foot, 32 by car, 1 by boat) plus 8 at feeders, 3 owling; 350.5 party miles (20 on foot, 327.5 by car, 3 by boat) plus 7 owling. Good details submitted for House Wren (JD, CS). 94 species, 88,564 individuals. Donald Blunk (compiler—Rt. 2, Box 791C, Dover 37058), Gayle Boone, Bill Cowart, Camille Crenshaw, Jerry Drewry, Vicki Grafe, Annie Heilman, Carl Mowery, Chris Sloan, Michael Todd, Wallace Todd, Ellen Walker.

BUFFALO RIVER—29 Dec; 0330–0530, 0615–1715; clear to partly cloudy; temp. 22–41°F; wind N 0–5 mph; 14 observers in 5 parties plus 1 at feeders; 39 party hours (17.25 on foot, 21.75 by car) plus 4 at feeders, 2 owling; 189.8 party miles (15 on foot, 174.8 by car) plus 17.7 owling. Good details submitted for Sandhill Crane (DI, DoS), Merlin (MB, RS, SS, DaS, CS), American Tree Sparrow (DaS, CS), and Lincoln's Sparrow (DaS). 82 species, 5,827 individuals. Andy Augustin, Michael Beuerlein, David Ihrie, Chester McConnell, Dot McConnell, Royce Neidert, Jane Newell, Ned Piper, Rebecca Satterfield, Steve Satterfield,

Table 1. Extended.

HIGH	PICK	COOK	NICK	CHAT	HIWA	NORR	KNOX	GSMNP	GREE	KING	ELIZ	BRIS	ROAN
10	–	2	1	29	4	–	–	1	–	–	–	–	–
32	13	35	166	136	191	52	114	9	52	32	12	32	29
–	–	–	2	4	2	–	–	–	–	–	–	–	–
–	–	–	25	74	39	2	1	–	–	–	–	–	–
–	–	–	–	1*	–	–	–	–	–	–	–	–	–
–	–	6	9	9	3	3	–	–	–	1	1	–	2
29	17	115	360	296	940	73	348	104	114	50	94	41	129
–	–	–	–	–	1*	–	–	–	–	–	–	–	–
–	1	2	122	59	189	7	43	4	2	12	3	1	1
26	18	108	481	439	1,131	164	839	142	202	42	182	106	49
–	–	–	1	3	20	10	14	–	24	–	2	4	–
77	62	39	177	225	467	92	104	63	68	68	328	132	118
–	–	–	–	–	–	–	–	–	–	–	–	–	–
–	–	–	–	–	–	–	–	–	–	–	–	–	–
1	–	10	216	3,300	1,083	–	220	–	266	2	–	–	–
64	5	72	56	182	127	1	25	17	182	26	28	8	–
–	–	1	28	20	111	–	–	–	12	15	–	–	–
–	–	–	–	–	–	–	–	–	–	–	–	–	–
11.3M	1,000	5,674	1,837	39	4,787	2	100	–	161	8	–	–	–
5	–	8	81	128	35	–	1	–	–	–	6	–	–
–	–	30M	–	–	–	–	–	–	–	–	–	–	–
–	–	–	–	–	–	–	1*	–	–	–	–	–	–
–	13	48	10	6	59	6	19	–	7	113	1	20	–
24	43	146	72	266	201	51	305	30	619	223	140	268	6
–	–	–	–	–	–	–	–	11	–	–	–	–	–
1	–	–	–	10	11	–	–	–	–	2	1	–	–
61	58	51	320	266	390	121	203	82	102	270	136	66	11
–	–	–	–	1	–	–	–	–	–	–	–	–	–
139	25	45	41	40	51	18	50	28	81	137	117	40	119
72	55	68	90	102	107	62	80	55	67	72	66	66	41

Donette Sellars, Damien Simbeck (co-compiler), Don Simbeck (co-compiler—117 2nd Ave. N, Loretto 38469) Chris Sloan, Wylie Willis.

COLUMBIA—26 Dec; 0600–1700; clear to partly cloudy; temp. 32–60°F; wind AM: SE 0–3 mph, PM: S 8–12 mph; 6 observers in 5 parties plus 3 at feeders; 31.5 party hours (18.5 on foot, 13 by car) plus 12 at feeders, 3 owling; 266 party miles (12 on foot, 254 by car) plus 25 owling. Also reported: 1 Mallard X Gadwall, good details (RF, GM, MM). 86 species, 23,842 individuals. Nancy Byer, Richard Figari, Daniel Gray, Jr., William Jernigan, Cleo Mayfield, George Mayfield (compiler—999 Sunnyside Dr., Columbia 38401), Mark Mayfield, Jane Oakes, Allen Pressnell.

NASHVILLE—26 Dec; 0630–1730; clear to partly cloudy; temp. 30–56°F; wind SE 0–5 mph; 33 observers in 9–11 parties plus 4 at feeders; 90.5 party hours (44.75 on foot, 45.5 by car, 0.25 by ferry) plus 10 at feeders, 3 owling; 544 party miles (38 on foot, 505.5 by car, 0.5 by ferry) plus 2 owling. Fair details submitted for Vesper Sparrow (RB, JMc). 76 species, 68,820 individuals. Janet Alexander, Robert Brayden, Elizabeth Collins, Connie Collopy, Richard Conners, Kinian Cosner, William Cowart, Annella Creech, Fairman Cumming, Chris DeBold, Rowan DeBold, Gerald Drewry, Milbrey Dugger, Lucy Finch, Margaret Finch,

John Fort, Katherine Goodpasture, Paul Hamel, Barbara Harris, Robert Hatcher, Lee Kramer, Galen Lenhert, Jane Maynard, Joe McLaughlin, Marjorie Patrick, Oscar Patrick, Virginia Price, Chistopher Sloan, Ann Tarbell (compiler—6033 Sherwood Dr., Nashville 37215), Edwin Toone III, Edwin Toone IV, David Vogt, Kenneth Walkup, Miriam Weinstein, Lamar Witmer, Betty Worden.

DUCK RIVER RESERVOIR—17 Dec; 0400–1800; partly cloudy; temp. 20–48°F; wind W 5–25 mph; 6 observers in 3 parties; 26 party hours (17 on foot, 9 by car) plus 3 owling; 191 party miles (6 on foot, 185 by car) plus 7.5 owling. 61 species, 3,159 individuals. Brad Hammond, Bill Jernigan, Alyn Lay, George Mayfield, Allen Pressnell (compiler—Rt. 6, Box 274G, Columbia 38401), Dianne Pressnell.

HICKORY-PRIEST—2 Jan; 0515–1715; cloudy; temp. 39–42°F; wind NNW 10 mph; 24 observers in 8 parties plus 1 at feeders; 65.5 party hours (33.5 on foot, 32 by car) plus 6 at feeders, 2 owling; 323 party miles (30 on foot, 293 by car) plus 23 owling. Good details submitted for Rough-legged Hawk (DV) and Merlin (CC, JD, BE, CS). 81 species, 26,745 individuals. Frances Abernathy, Jan Alexander, Linda Anderson, Kinian Cosner, Camille Crenshaw, Chris DeBold, Rowan DeBold, Jerry Drewry (compiler—444 Dowdy Dr., Antioch 37013), Bob English, Katherine Goodpasture, Louis Jackson, Daniel Jacobson, Lee Kramer, Heather Leverette, Richard Newton, Johnny Parks, Betty Richards, Christopher Sloan, Joe Stone, Ann Tarbell, Mike Todd, Edwin Toone III, Julia Toone, David Vogt.

MURFREESBORO—7 Jan; 0630–1630; partly cloudy; temp. 40–71°F; wind SW 15–17 mph; 15 observers in 7 parties; 26 party hours (3 on foot, 23 by car) plus 4 at feeders; 272.6 party miles (3 on foot, 269.6 by car). 58 species, 17,071 individuals. Bill Erwin, Lou Erwin, C. E. Greever, Anne Hettish (compiler—1018 Lawndale Dr., Murfreesboro 37129), Bob Hettish, John Hooper, Richard Hunter, Wilma Hunter, David McCarroll, Ruth McMillan, Gene Odom, Ruth Odom, John Patton, Melissa Tucker, Terry Witt.

LEBANON—17 Dec; 0545–1600; partly cloudy; temp. 28–38°F; wind NW 10–20 mph; 8 observers in 4 parties plus 1 at feeders; 37 party hours (2 on foot, 35 by car) plus 1 at feeders, 1 owling; 66.5 party miles (3.5 on foot, 63 by car) plus 10 owling. 65 species, 3,278 individuals. Earline Berry, V. C. Berry, Tim Gorman, Ruth McMillan (compiler—Rt. 2, Box 141, Lascassas 37085), Kay Norris, Ray Pope, Ann Reese, Ramona See.

HIGHLAND RIM—31 Dec; 0600–1800; cloudy with AM fog, PM rain; temp. 40–51°F; wind calm; 19 observers in 9 parties; 36 party hours (5 on foot, 31 by car) plus 0.5 owling; 325 party miles (3 on foot, 322 by car) plus 0.5 owling. 72 species, 15,514 individuals. John Bruner, Lois Bruner, Marguerite Hernandez, Don Herrig, Keith Herrig, Ruth Luckado, Hose Martinez, Nicky Medley, Philip Medley (compiler—Rt. 2, Box 173B, Hillsboro 37342), Erma Rogers, Mary Shelton, Quincy Styke, Carol West, Gene West, Lillie Willerd, Evelyn Wilson, Grady York, Willa York.

PICKETT CO.—30 Dec; 0700–1620; partly to mostly cloudy with light PM rain; temp. 32–38°F; wind W 5–10 mph; 2 observers in 1 party; 9.25 party hours (all by car); 49.8 party miles (all by car). 55 species, 2,821 individuals. Dave Hassler, Robbie Hassler (compiler—Rt. 1, Box 164A, Byrdstown 38549).

COOKEVILLE—16 Dec; 0515–1630; partly cloudy to clear; temp. 20–32°F; wind NW 5–10 mph; 11 observers in 5 parties; 38.5 party hours (7.25 on foot, 31.25 by car) plus 2 owling; 272.3 party miles (6.5 on foot, 265.8 by car) plus 5 owling. Good details submitted for Greater Scaup (SS, present since 15 Nov) and Sandhill Crane (RH/SS/DHu, KH, WJ). 68 species, 48,998 individuals. Jean

Cashion, Richard Cashion, Dave Hassler, Robbie Hassler, David Hume, Kay Hume, William Jones, Graham Kash, Richard Simmers (compiler—Rt. 6, Box 170, Cookeville 38501), Stephen Stedman, Joe Wahl.

NICKAJACK—31 Dec; 0450–1700; AM cloudy with heavy fog, PM fog and heavy rain; temp. 41–47°F; wind S 0–10 mph; 26 observers in 9 parties; 78.25 party hours (40.5 on foot, 37.75 by car) plus 11.5 owling; 332.5 party miles (25.5 on foot, 307 by car) plus 85 owling. Fair details submitted for Peregrine Falcon (JH, TP). Good details submitted for American Tree Sparrow (JD). 90 species, 99,865 individuals. Benton Basham, Nelson Bennett, Del Blum, Katherine Boyles, Kenton Dickerson, Jerry Drewry, Gary Hartman, John Henderson, Daniel Jacobson, Kathy Jacobson, Lenny Kafka, Starr Klein, Jonnie Sue Lyons, Johnny Parks (compiler—1610 E. 17th St., Chattanooga 37404), Tom Patton, Kent Pennington, Peter Robinson, Mark Rothberger, Robin Rudd, Rebecca Satterfield, Steve Satterfield, Joe Stone, Carl Swafford, Chris Swafford, Dale Taylor, Michael Todd.

CHATTANOOGA—17 Dec; 0700–1800; partly cloudy to clear; temp. 23–39°F; wind NW 0–15 mph; 35 observers in 12 parties plus 2 at feeders; 104 party hours (63.5 on foot, 31.5 by car, 9 by boat) plus 6.5 at feeders, 8 owling; 571 party miles (51.5 on foot, 489.5 by car, 30 by boat) plus 86 owling. Good details submitted for Common Merganser (EG, DWo), *Selasphorus* sp. (PG et al., present since mid-October), Orange-crowned Warbler (PH, PR), and LeConte's Sparrow (RR). 102 species, 20,307 individuals. Clyde Blum, Edith Bromley, Louise Cash, David Chaffin, Brainard Cooper, Bob Crawford, Angela Davis, Ken Dubke, Lil Dubke, Paul Gabor, Edgar Grundset, Paul Harris, John Henderson (compiler—7323 Fairington Circle, Hixon 37343), Darryl Hosford, Ella Howard, J. N. Howard, Daniel Jacobson, Lenny Kafka, Starr Klein, Sandy Kurtz, Polly Lane, William Lane, Jonnie Sue Lyons, Barbara McMahan, Michael McMahan, Dottie Patton, Robert Pierce, Don Ritzhaupt, Sukie Ritzhaupt, Peter Robinson, Tommie Rogers, Robin Rudd, Donnie Rush, Bernie Tompkins, Dan Williams, Dick Wodenski.

HIWASSEE—1 Jan; 0500–1800; mostly cloudy; temp. 42–47°F; wind NW 5 mph; 22 observers in 9 parties; 86 party hours (57 on foot, 26 by car, 3 by boat) plus 5.5 owling; 477.9 party hours (43 on foot, 424.9 by car, 10 by boat) plus 47 owling. Good details submitted for Tundra Swan (LD, EK, probably same bird since 12 Nov) Common Merganser (LD, EK), Forster's Tern (LD, reported as Tern sp., but details and logic indicate Forster's), American Tree Sparrow (DR, CW), Lincoln's Sparrow (DS). 107 species, 25,751 individuals. Mark Armstrong, Clyde Blum, Richard Clark, Ken Dubke, Lil Dubke, Audrey Hoff, Darryl Hosford, Lenny Kafka, Elena Killian, Brian Locke, Charles Nicholson, Chris Norris, David Patton, Tom Patton, Mark Reeves, Robin Rudd (compiler—7611 Davidson Dr., Chattanooga 37421), Don Rush, Boyd Sharp, Damien Simbeck, Bernie Tompkins, Craig Watson, Dick Wodenski.

NORRIS—17 Dec; 0530–1800; cloudy to partly cloudy with AM flurries; temp. 24–36°F; wind NNW 5–15 mph; 8 observers in 4 parties; 27 party hours (16 on foot, 11 by car) plus 2 owling; 131 party miles (11 on foot, 120 by car) plus 15 owling. 62 species, 3,093 individuals. John Byrd, Richard Clark, Audrey Hoff, Ron Hoff, Fred Holtzclaw, Linda Fowler, George McKinney, Charles Nicholson (compiler—Box 402, Norris 37828).

KNOXVILLE—18 Dec; 0530–1730; partly cloudy to clear; temp. 16–38°F; wind SW 0–16 mph; 27 observers in 14 parties plus 2 at feeders; 106 party hours (62 on foot, 44 by car) plus 2 at feeders, 6 owling; 603 party miles (52 on foot, 551 by car) plus 30 owling. Fair details submitted for Great Egret (TK) and Northern Oriole (LF, SH, DP). 80 species, 24,429 individuals. Jane Beintema,

Chris Butler, Betty Campbell, James Campbell, Richard Clark, Carol Coleman, Marcia Davis, Barbara Finney, James Finney, Louise Fuller, Audrey Hoff, Ron Hoff, Joseph Howell, Susan Hoyle, Kate Johnston, Tony Koella, Bettie Mason, James Mason, Robert Mistak, Charles Nicholson, Holly Overton, Paul Pardue, Don Powers, Mark Reeves, Martha Rudolph, Boyd Sharp, James Tanner (compiler—417 Switzerland Dr., Knoxville 37920).

GREAT SMOKY MOUNTAINS NP—31 Dec; 0600–1700; cloudy with PM rain; temp. 32–58°F; wind var. 0–5 mph; 22 observers in 10 parties; 79.5 party hours (63.5 on foot, 16 by car) plus 0.75 owling; 220.3 party miles (74.5 on foot, 145.8 by car) plus 3 owling. The chickadees were of both species. 55 species, 2,671 individuals. Mark Armstrong, Jane Beintema, John Burkhart, Betty Campbell, James Campbell, Richard Clark, Don DeFoe (non-participating compiler—Great Smoky Mountains NP, Gatlinburg 37738), Louise Fuller, Audrey Hoff, Ron Hoff, J. C. Howell, Ellie Koella, Tony Koella, Robert Mistak, Charles Nicholson, Holly Overton, Paul Pardue, Mark Reeves, Bob Scott, Boyd Sharp, Damien Simbeck, James Tanner, Mary Trice.

GREENEVILLE—2 Jan; 0700–1830; cloudy to mostly cloudy; temp. 38–45°F; wind NW 5 mph; 22 observers in 8 parties plus 7 at feeders; 36.25 party hours (12.5 on foot, 23.75 by car) plus 18.75 party hours at feeders, 0.5 owling; 226.5 party miles (11.5 on foot, 215 by car) plus 0.5 owling. 67 species, 8,619 individuals. Ben Britton, Ed Britton, Orland Britton, Phine Britton (compiler—1750 Gott Dr., Greeneville 37743), Tio Carlos, Margaret Gaut, William Gaut, Juanita Heckert, Lenard Heckert, Don Holt, Jim Holt, Richard Knight, Richard Nevius, Willie Nevius, Daniel Nieves, Kay Nieves, Doug Ratledge, Helen Reed, Joanne Routledge, Larry Routledge, Helen Spees, Royal Spees, Virginia Williams.

KINGSPORT—31 Dec; 0700–1900; cloudy; temp. 36–42°F; wind PM SW 5 mph; 16 observers in 6 parties plus 1 at feeders; 49 party hours (14.8 on foot, 34.2 by car) plus 8 at feeders, 2 owling; 298 party miles (13 on foot, 285 by car) plus 30 owling. 72 species, 7,712 individuals. Reba Baker, Danny Blakley, Sandra Driskell, Kathy Dowda, David Golland, Jim Golland, Lugia Hawkins, Wynn Herbert, George Larkins, Tom Laughlin, Betsy McConnell, Betty Ottenfield, Bob Quillen, E. E. Scott, Arthur Smith (compiler—100 Otari Dr., Kingsport 37664), Frank Williams, Kristin Zimet.

ELIZABETHTON—17 Dec; 0415–1730; cloudy to mostly cloudy with snow flurries, 1–2 inch accumulation in high elevations; temp. 22–28°F; wind W 5–18 mph; 18 observers in 5 parties; 46 party hours (25 on foot, 21 by car) plus 3.5 owling; 309 party miles (22 on foot, 287 by car) plus 18 owling. 66 species, 5,098 individuals. Fred Alsop, Cat Bireley, Jim Brooks, Janet Brown, Linda Campbell, Brian Cross, Glen Eller, Harry Farthing, Sally Goodin, Bill Henninger, Brenda Hull, Rick Knight (compiler—804 N Hills Dr., Johnson City 37604), Dick Lura, Ed Schell, Cathi Sullins, Glenn Swofford, Gary Wallace, Frank Ward.

BRISTOL—31 Dec; 0730–1800; cloudy to partly cloudy; temp. 37–47°F; wind var. 0–5 mph; 11 observers in 5 parties plus 1 at feeders; 33.5 party miles (12 on foot, 21.5 by car) plus 3 at feeders, 1.5 owling; 302 party miles (6 on foot, 296 by car) plus 16 owling. 66 species, 4,532 individuals. Jim Boyd, Mary Boyd, Wallace Coffey, Glen Eller, Bert Hale, Loraine Hale, Joe Jackson, Richard Lewis (compiler—Rt. 3, Box 590, Bristol 37620), Vickie Lewis, Don Littrell, Randall Smith, Sarah Smith.

ROAN MOUNTAIN—18 Dec; 0545–1645; partly cloudy with 0–4 inch snow cover; temp. 4–26°F; wind W 10–30 mph; 10 observers in 3 parties; 26 party hours (15 on foot, 11 by car) plus 1.5 owling; 120 party miles (8 on foot, 112 by car) plus 4 owling. 41 species, 1,180 individuals. Fred Alsop, Danny Blakely, Jim

Brooks, Brian Cross, Sandra Driskell, Glen Eller, Rick Knight (compiler), Glenn Swofford, Gary Wallace, Frank Ward.

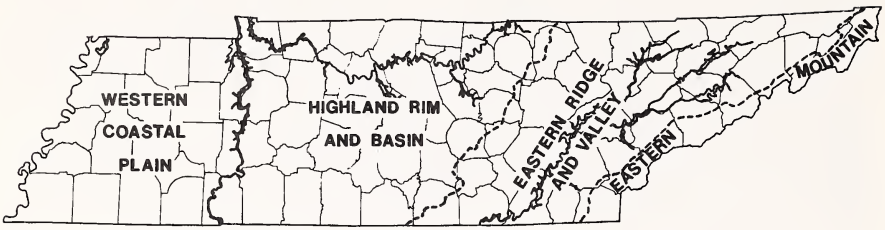
Addendum: The 1987 Christmas Bird Count (*Migrant* 59:5–13) did not include the Reelfoot Lake count; the results of that count follow. Reelfoot 22 Dec 1987; 0500–1630; clear, temp. 43–58°F; wind NW 0–5 mph; 11 observers in 6 parties; 45 party hours (12 on foot, 28 by car, 5 by boat) plus 1 owling; 429 party miles (21 on foot, 394 by car, 14 by boat) plus 5 owling. Fair details submitted for Spotted Sandpiper (Coffey party). 97 species, 120,649 individuals. Ben Coffey, Lula Coffey, Harold Elphingstone, Kenneth Leggett, Don Manning (compiler—Rt. 2, Box 81A, Buchanan 38222), Frank McCamey, David Pitts, Glenn Stanley, Donald Temple, Michael Todd, Wallace Todd.

Pied-billed Grebe 11; D-cr. Cormorant 4; Great Blue Heron 137; Gr. Wh.-fr. Goose CW; Snow Goose 10s, 5b; Canada Goose 28.1M; Wood Duck 27; Green-winged Teal 19; Am. Black Duck 790; Mallard 57.4M; Northern Pintail 108; Blue-winged Teal 30; Northern Shoveler 60; Gadwall 3,250; American Wigeon 2,025; Canvasback 8; Redhead 3; Ring-necked Duck 80; Lesser Scaup 40; Common Goldeneye 4; Bufflehead 10; Hooded Merganser 22; Common Merganser 3; R.-br. Merganser 1; Ruddy Duck 758; Black Vulture 5; Bald Eagle 37a, 30i; Northern Harrier 10; Sharp-shinned Hawk 1; Cooper's Hawk 1; Red-shouldered Hawk 14; Red-tailed Hawk 42; American Kestrel 53; Wild Turkey CW; Northern Bobwhite 10; American Coot 508; Killdeer 99; Spotted Sandpiper 1; Common Snipe 53; Bonaparte's Gull CW; Ring-billed Gull 59; Herring Gull 1; Rock Dove 27; Mourning Dove 87; E. Screech-Owl 2; Great Horned Owl 1; Barred Owl 7; Short-eared Owl 1; Belted Kingfisher 10; Red-hd. Woodpecker 85; Red-bel. Woodpecker 137; Yel.-bel. Sapsucker 15; Downy Woodpecker 54; Hairy Woodpecker 11; Northern Flicker 129; Pileated Woodpecker 20; Eastern Phoebe 1; Horned Lark 94; Blue Jay 150; American Crow 458; Carolina Chickadee 165; Tufted Titmouse 59; Red-br. Nuthatch 2; White-br. Nuthatch 19; Brown Creeper 1; Carolina Wren 67; House Wren 1; Winter Wren 4; Golden-cr. Kinglet 11; Ruby-cr. Kinglet 29; Eastern Bluebird 61; Hermit Thrush 4; American Robin 146; Northern Mockingbird 39; Brown Thrasher 23; Water Pipit 4; Cedar Waxwing 14; Loggerhead Shrike 22; European Starling 8,386; Yel.-rumped Warbler 188; Northern Cardinal 220; Rufous-s. Towhee 15; Field Sparrow 56; Savannah Sparrow 20; Fox Sparrow 25; Song Sparrow 152; Swamp Sparrow 77; White-th. Sparrow 244; White-cr. Sparrow 7; Dark-eyed Junco 204; Red-wng. Blackbird 6,684; Eastern Meadowlark 137; Rusty Blackbird 116; Brewer's Blackbird 3; Common Grackle 5,386; Brown-hd. Cowbird 2,644; Purple Finch 2; Pine Siskin 1; American Goldfinch 42; House Sparrow 184.

The Migrant, 60(1):24–36, 1989

THE SEASON

John C. Robinson, Editor



FALL: 1 AUGUST–30 NOVEMBER 1988

Although the spring is accompanied by its brilliantly plumaged warblers, the fall is always the more exciting season to many ornithologists. This year was no exception. The weather patterns across the state saw normal and below normal amounts of precipitation, neither of which helped to ease the effects of the long-term drought. However, some of the major reservoirs were maintained at full-pool level. This combination of conditions resulted in a notably localized distribution of shorebirds; nevertheless, a great diversity of shorebirds was still represented from across the state.

Common Terns made a surprising appearance along the Mississippi River and in east Tennessee. Although this species is less frequently found in Tennessee than the Forster's Tern, it is sometimes reported in flocks that outnumber most concentrations of Forster's Tern in Tennessee. In 1942, *Migrant* editor Ben B. Coffey, Jr., coordinated a cooperative paper on the wrens of Tennessee (*Migrant* 13:1–13). A similar contribution, examining the chronology, abundance and distribution of Forster's and Common Terns on migration across the state, would be a valuable addition to the ornithology of Tennessee. Much of the information on the field identification of these two species that is available today did not exist 20 years ago. Anyone wishing to coordinate such a project should contact this editor at his/her earliest convenience.

A series of weak cold fronts in early and mid-fall may have been responsible for the arrival of some species ahead of schedule (e.g., Gadwall, Short-eared Owl, Greater White-fronted Goose and Northern Goshawk). This fall also saw a Magnificent Frigatebird added to the list of birds officially seen in Tennessee. Sharp-tailed and Le Conte's Sparrows are becoming more regularly reported, as evidenced by field work conducted in October and November. Wood Storks and Black-legged Kittiwakes also appeared in two of the four reporting regions.

Details on the general observations noted above, as well as all of the other important sightings made this fall, are provided in the following report. First-time readers of this report, as well as all regular readers, are encouraged to submit their bird sightings to the appropriate Regional Compiler. Observers are again urged to provide written documentation of very rare species to their compilers. The publication of sightings of very rare birds that have been submitted without documentation is often less than desirable.—John C. Robinson

The following abbreviations are used in the text: ad = adult; b = banded; EOP = end of period; ers = earliest reported sighting; im = immature; lrs = latest reported sighting; max = maximum 1-day count during period; m. ob. = many observers; NWR = National Wildlife Refuge; ph = photographs; SBC = Spring Bird Count; S.P. = State Park; yg = young; * = documented record; ** = specimen record.

WESTERN COASTAL PLAIN REGION—The drought conditions that were noted during the summer continued unabated into the fall season until mid-November. Migration was depressed as transients arrived sporadically in waves ranging from very few to expected average numbers. Winter residents generally arrived late but did not appear to be any more or less common than normal. Migrating raptors were well reported, due in part to a 6-hour hawk watch conducted by Jeff Wilson on 24 September in Shelby Co.; data from that effort have been incorporated into this report. A heron/egret roost in southwest Shelby Co. generated interest among MTOS, and counts there swelled into the thousands. Even with drought-like conditions the Ensley Sewage Lagoons attracted many shorebirds; according to Manomet Bird Observatory, the lagoons comprise one of the better populated shorebird areas in the inland United States.

Loon–Falcon: Common Loon: 21 Nov (25) HNC (DWB); 7 Nov (1) Reelfoot Lake, LKC (WGC). Pied-billed Grebe: 21 Nov (62) HNC (DWB). Horned Grebe: 24 Oct (24) PLS (DWB); 30 Oct (3/4) McKellar Lake, SBC/MEM Riverfront (JRW, DAD); 21 Nov (170) HNC (DWB), a notable concentration. American White Pelican: 25 Oct (4 ad) Great River Road, near Is 21 (WGC). Double-crested Cormorant: 4 Oct (15) Is 21 (WGC); 8 Oct (130) Mississippi River, SW SBC (JRW, DAD); 24 Oct (160+) PLS (DWB); 30 Oct (225) SFP (MTOS); 7 Nov (300) Reelfoot Lake, LKC (WGC); 25 Nov (135) Mississippi River, SW SBC (Diane Bean, LCC, VBR, MGW). Anhinga: 4 Sep (2) ESL (DJS). The north end of Ensley Bar (ENB), River Mile 719 on the Mississippi River, was used as a rookery in 1987, according to the U.S. Corps of Engineers; approximately 200 Cattle Egret nests were counted last year. This year the area was not used as a rookery. However, on 6 August 1988, a count was made of the species using the island as a roost. See *Migrant* 59:118–119 for detailed information on the count. Sightings made on subsequent visits are included in this report. Great Blue Heron: 27 Oct (68) DYC (WGC); 30 Oct (98) Mississippi River, NW SBC (JRW). Great Egret: 22 Aug (100) Great River Road, LKC (WGC); 10 Sep (500) Lower Hatchie NWR, LDC (Linda Waters); 13 Sep (1500) ENB (Ray and Ted Wilson, MGW), highest 1-day count in the state; 11 Oct (75) ESL (Bill and Sarah Whitley); 27 Oct (68) Is 21 (WGC); 21 Nov (2) BSU (DWB). Snowy Egret: 11 Aug (156) ENB (JRW, DJS), max.; 21 Aug (96) MUL (JRW, DAD, LCC); 22 Aug (50) LKC (WGC); 10 Sep (70) Is 21 (WGC). Little Blue Heron: 2 Aug (500) MUL (JRW, DAD). TRICOLORED HERON: 31 Jul–27 Aug (1–26) ESL, MUL (JRW, DAD, CGD, LCC); most, if not all, were immature birds. Black-crowned Night-Heron: 2 Aug (5 ad, 3 im) Is 21 (WGC); 6–27 Aug (2–12) ENB (JRW, m. ob.). White Ibis: 5 Aug–17 Sep (1–15 im) MUL, ENB (JRW, DAD, m. ob.); the birds using Mud Lake during the day were most likely the same ones observed flying to roost at ENB in the evening. WOOD STORK: 27 Aug (70) ENB (JRW, m. ob.); 13 Sep (206) ENB (Ray and Ted Wilson, MGW), max. Green-winged Teal: 21 Nov (220) HNC (DWB). Canvasback: 5 Nov (80) BRF (DWB). Redhead: 29 Oct (38) BRF (DWB). Greater Scaup: 21 Nov (7) HNC (DWB), rare in the Western Coastal Plain region of the state. Oldsquaw: 29 Oct (2) BRF (DWB). BLACK SCOTER: 29 Oct (1) PLS (DWB); 4 Nov (1) PLS (DJS); 21 Nov (1) BSU (DWB). Surf Scoter:

29 Oct (1) BRF (DWB); 24 Nov (1) Pickwick Lake, Hardin Co. (DJS). Common Goldeneye: 21 Nov (132) HNC (DWB). Bufflehead: 21 Nov (430) HNC (DWB), an unusually large concentration. Hooded Merganser: 21 Nov (175) HNC (DWB). Common Merganser: 19 Nov (3) BRF (AHH, Nita R. Heilman, DWB), ers. Red-breasted Merganser: 30 Oct (3) PLS (DWB); 30 Oct (9) SFP (JRW); 9 Nov (1) PEF (CHB, SLL, NMS, VBR, BHW). Ruddy Duck: 2 Aug (1 male) Is 21, 10 Oct (2) Is 21 (WGC); 21 Nov (250+) HNC (DWB). Osprey: 5 Sep (10) Millsfield, 23 Sep (1) Heloise, 10 Oct (2) Is 21 (WGC), all in DYC; 24 Sep (3) ESL (JRW); 9 Oct (1) PLS (DWB). Mississippi Kite: well distributed in LKC and DYC, but no large flocks (WGC). Bald Eagle: 16 Sep (1 im) PEF (JRW); 21 Oct (1 im) Is 21 (WGC). Sharp-shinned Hawk: regularly reported in small numbers at scattered locations beginning in late Sep. Cooper's Hawk: 24 Sep (4) ESL (JRW), max. Rough-legged Hawk: 24 Nov (1) Pittsburg Landing, Hardin Co. (DJS). Merlin: 5, 6 Oct (1) MEM (JRW); 15 Oct (1) ESL (JRW); 15 Oct (1) PEF (MTOS); 7 Nov (1) PEF (JRW). Peregrine Falcon: 24 Sep (3) ESL (JRW); 2 Oct (1) PEF (MGW); 16 Nov (1) MEM (Walk Jones).

Rail–Owl: Sora: 10 Sep (2) Heloise, DYC (WGC). Biweekly trips to the T. J. Maxson Sewage Lagoons (ESL) continued this season. Observations since 1982 have been submitted to Manomet Bird Observatory, International Shorebird Surveys. They have indicated that the records from ESL are among the highest reported for a sewage treatment plant. The following shorebird data from this area reflect the lowest and highest numbers seen during the period. Black-bellied Plover: 6, 27, 31 Oct (1, 5, 7) Is 21 (WGC). Lesser Golden-Plover: 6 Oct (1) Is 21 (WGC). Semipalmated Plover: 5 Aug–18 Sep (2–9) ESL (CHB, VBR, MGW). Piping Plover: 11 Aug (2) ESL (JRW, DJS); 14 Aug (1) ENB (JRW, DAD, Michael L. Bierly, CGD). Killdeer: 5 Aug–6 Nov (4–231) ESL (CHB, VBR, MGW). Lesser Yellowlegs: 5 Aug–29 Oct (2–78) ESL (CHB, VBR, MGW). Solitary Sandpiper: 5 Aug–10 Oct (1-33) ESL (CHB, VBR, MGW). Sanderling: 4 Sep (1) ESL (DJS); 4 Sep (24) Ballard Slough, Tipton Co. (DJS, Richard L. Wittington), max; 5 Sep (5) Is 21 (WGC); 7 Sep (4) Is 13 (WGC). Semipalmated Sandpiper: 5 Aug–22 Sep (2–94) ESL (CHB, VBR, MGW). Western Sandpiper: 5 Aug–27 Oct (1–3) ESL (CHB, VBR, MGW). Least Sandpiper: 5 Aug–6 Nov (1–250) ESL (CHB, VBR, MGW, MTOS). Baird's Sandpiper: 28 Aug, 18 Sep (1, 1) ESL (VBR, MGW); 8–26 Sep (4) Is 21 (WGC), max; 23 Sep (1) Heloise, DYC (WGC); 24 Sep (1) ESL (JRW). Pectoral Sandpiper: 5 Aug–29 Oct (6–525) ESL (CHB, VBR, MGW). Dunlin: 21 Oct (5) Is 21 (WGC); 27 Oct, 1 Nov (2, 1) ESL (CHB, VBR, MGW); 5 Nov (3) BRF (DWB). Stilt Sandpiper: 10–27 Aug (1–21) ESL (CHB, VBR, MGW); 8 Sep–4 Oct (30+, with 48 birds present on 15 Sep) Heloise, DYC (WGC). Buff-breasted Sandpiper: 21 Aug (4) ESL (VBR, MGW); 4 Sep (2) Ballard Slough, Tipton Co. (DJS); 8, 10 Sep (1) Heloise, DYC (WGC). RUFF: 21 Aug (1 female) ESL (*MGW, VBR), the 2nd reported *and* accepted sighting for Tennessee; details to be published. *Stercorarius* (JAEGER) sp.: 2 Sep (1) on Kentucky Lake at PLS (*DJS, JCR). Laughing Gull: 25 Sep (3) Mississippi River, SW SBC (JRW). Franklin's Gull: 6 Nov (16) Mississippi River, SW SBC (JRW, DAD), an unusually high concentration. BLACK-LEGGED KITTIWAKE: 20 Nov (1 ad) on Kentucky Lake at PLS (*DJS, CAS, Mert Sloan), 1st west Tennessee record, 6th record for state. Caspian Tern: 16 Oct (1) PLS (DJS). Common Tern: 1 Oct (30) Mississippi River, SW SBC (JRW), high number. Forster's Tern: 5 Sep (11) Is 21 (WGC); 9 Sep (16) PLS (DWB); 29 Oct (1) PLS (DWB). Black Tern: 5 Aug (15) ESL (Murray L. Gardler). Short-eared Owl: 19 Nov (1) BSU (DJS).

Flycatcher–Oriole: Olive-sided Flycatcher: 21 Aug (1) DYC (CHB). WESTERN KINGBIRD: 20–29 Sep (1–2) Bartlett, SBC (JRW), at the same location as re-

ported last year; 1 Nov (1) ESL (CHB, MGW). Purple Martin: 6 Aug (9,000) ENB (JCR, JRW, DAD, CHB). Tree Swallow: 8 Oct (1,500) Robco Lake, SW SBC (Ben B. Coffey, Jr., LCC); 27 Oct (10) Fort Pillow S.P., LDC (MTOS); 30 Oct (11) SFP (MTOS); 13 Nov (9) State Road 87, LDC (CHB, MGW). Brown Creeper: 25 Aug (1) SFP (Jo L. Levy, Dwight Miller), possibly summered? House Wren: 15 Oct (5) ENB (JRW, DJS); 30 Oct (1) SFP (MTOS). Water Pipit: 9 Nov (2) PEF (CHB, SLL, NMS, VBR, BHW); 10 Nov (7) BRF (DWB). Solitary Vireo: 6 Oct (1) PEF (MGW, Bill Cantrell); 26 Oct (1) KEP (CHB, BHW). Orange-crowned Warbler: 15 Oct (1) ENB (JRW, DJS); 19 Oct (1) PEF (CHB); 30 Oct (1) PEF (MTOS). BLACK-THROATED BLUE WARBLER: 24 Sep (1 female) Ponderosa Properties, DTC (CHB), details on file; 5th west Tennessee record, 1st DTC record. Yellow-rumped Warbler: 26 Oct (125) KEP (CHB, BHW). Yellow-throated Warbler: 16 Oct (1) MEM (VBR). Palm Warbler: 19 Oct (1) PEF (CHB). Connecticut Warbler: 15 Sep (1) PEF (VBR, MGW); 15 Oct (1) MEM (JRW). Grasshopper Sparrow: 29 Oct (1), 5 Nov (4) PEF (JRW, DJS, DAD). Le Conte's Sparrow: 2 Nov (1) (TJW), 5 Nov (1) (DWB), 20 Nov (1) (DJS, Johnny Parks), all at BRF. Sharp-tailed Sparrow: 9, 29 Oct (1, 1) BRF (DWB). Lincoln's Sparrow: 9 Oct (2) PEF (JRW); 15 Oct (5) ESL (JRW). White-crowned Sparrow: 19 Oct–EOP (25–30) MEM (MGW), max. Harris' Sparrow: 6 Nov (1) McKellar Lake, SBC (JRW, DAD). Dark-eyed Junco: 27 Sep (2) SFP (VBR, Helen B. Dinkelspiel, SLL, NMS), ers. Lapland Longspur: 8 Nov (170+) PEF (JRW); 9 Nov (10+) PEF (CHB, SLL, NMS, VBR, BHW). Bobolink: 26 Oct (1) BRF (TJW), unusually late. Western Meadowlark: 5–13 Nov (2) PEF (JRW, m. ob.). Orchard Oriole: 20 Aug (1) NE DTC (CHB).

Locations: BRF—Britton Ford, Tennessee NWR, Henry Co.; BSU—Big Sandy Unit, Tennessee NWR, Henry Co.; DTC—Decatur Co.; DYC—Dyer Co.; ENB—Ensley Bar, Shelby Co.; ESL--Ensley Sewage Lagoons, Shelby Co.; HNC—Henry Co.; Is 13—Island 13, Lake Co.; Is 21—Island 21, Dyer Co.; KEP—Kennedy Park, Memphis, Shelby Co.; LDC—Lauderdale Co.; LKC—Lake Co.; MEM—Memphis, Shelby Co.; MUL—Mud Lake, Memphis, Shelby Co.; PEF—Penal Farm, Shelby Co.; PLS—Paris Landing S.P., Henry Co.; SBC—Shelby Co.; SFP—Shelby Forest S.P., Shelby Co.

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HIGHLAND RIM AND BASIN REGION—Several rare species were reported in the region this fall. Most significant was the occurrence of a Magnificent Frigatebird in Columbia that can almost surely be attributed to Hurricane Gilbert's passage through the Gulf of Mexico. This record constitutes the 2nd state record (see the Eastern Ridge and Valley section of this Season report for the 1st state record). Other notable records include 2 Glossy Ibis at Gallatin Steam Plant, a Wood Stork at Cross Creeks NWR, the first Davidson Co. record of Ruffed Grouse, a Common Ground-Dove that collided with a window in Clarksville, and the possible occurrence of the "Red-shafted" form of the Northern Flicker in Nashville.

Numbers of some of the more common species showed unusual trends. For example, while transient thrushes were reported in fairly high numbers on the Plateau, they were almost absent in Nashville and were also reported in very low numbers in localities west of Nashville. Conversely, Yellow-rumped Warblers were present in extremely large numbers throughout the region. Boreal species were represented by only a few records, with 1 report of Pine Siskin and 2 reports of Red-breasted Nuthatch; no Evening Grosbeaks were reported. Purple Finches

were also low, but House Finches were reported in many localities where they had not previously been recorded.

The wild food crop in the region proved to be exceptional. Berry-producing plants such as dogwood, privet, poison ivy (perhaps the good poison ivy berry crop accounts for the large numbers of Yellow-rumped Warblers present this season), and bush honeysuckle produced an enormous amount of fruit; much of which was still on the plants at the end of the period. The mast crop was generally good, though nuts on the Plateau were more plentiful than in the Basin. Weed seeds were also present in fairly good quantities throughout the region.

The weather conditions in the area continued to be generally warmer and drier than normal. Hurricane Gilbert passed through the Gulf of Mexico in mid-September but produced no extreme weather conditions in the region. In Nashville, rainfall was 1.3 inches below normal for the period, with only November receiving more than the average amount of rain. Temperatures in Nashville were slightly above normal for August, September and November, but were slightly below normal in October.

Loon–Stork: Red-throated Loon: 13 Nov (1) WDR (CAS). Horned Grebe: 7 Sep (1) Franklin Reservoir, WMC (Elizabeth O'Connor), ers. Double-crested Cormorant: 4 Aug (1) Duck River Unit, Tennessee NWR, HPC (JCR), ers; 2 Oct (58) GSP (CAS, CGD, VJS), max. MAGNIFICENT FRIGATEBIRD: 27 Sep (1) Ladue Manor subdivision, Columbia, MUC (*WNJ), 2nd state record; this bird was recorded 3 days after the first observation of this species in the state and within 2 weeks of Hurricane Gilbert's passage through the Gulf of Mexico. Great Egret: 10 Aug (12) CCNWR (DWB); 18 Oct (4) CCNWR (DWB), lrs. Snowy Egret: 1 Aug–5 Sep (1–3) CCNWR (DWB), only report for region. Little Blue Heron: 10 Aug (144) CCNWR (DWB), max. Cattle Egret: 23 Oct (3) CFC (MDH, FDH), only reported sighting. Green-backed Heron: 9 Nov (1) BWMA (DWB), lrs. White Ibis: 28 Aug, 3 Sep (1 im) MOP (ARL, OBL). GLOSSY IBIS: 2 Sep (2) GSP (*DJS, DTC, JPC, RYN). WOOD STORK: 10 Aug (1) CCNWR (DWB), 3rd SWC record.

Goose–Duck: Greater White-fronted Goose: 17 Oct–10 Nov (6–11) CCNWR (JCR, DWB). Snow Goose: 24 Oct (2 blue phase, 1 white phase) CCNWR (JCR), ers. Wood Duck: 5 Nov (150+) Lake Olallala, DVC (Debbie Hill), max. American Black Duck: 29 Aug (3) BWMA (DWB), ers. Northern Pintail: 5 Sep (3) CCNWR (DWB), ers; 5 Nov (127) CCNWR (DWB), max. Blue-winged Teal: 5 Aug (2) CCNWR (JCR), ers; 29 Aug (153) CCNWR (DWB), max; 21 Oct (1) CCNWR (DWB), lrs. Northern Shoveler: 23 Aug (2) CCNWR (DWB, JCR), ers; 5 Nov (16) CCNWR (DWB), max. Gadwall: 29 Aug (7) CCNWR (JCR), ers. Canvasback: 2–30 Nov (up to 50) Franklin Reservoir, WMC (Elizabeth O'Connor), max. Redhead: 4 Nov (2) Franklin Reservoir, WMC (CAS), only report for region. Ring-necked Duck: 1 Oct (1) RDL (NTOS), ers. Oldsquaw: 20 Nov (1 female) RDL (DJS). Surf Scoter: 25 Nov (1) RDL (CAS).

Vulture–Falcon: Black Vulture: 30 Nov (350) Salem-Lexie Rd., FKC (J. J. Bruner), max. Bald Eagle: 1 Sep (1 im) Buffalo River, MUC (WNJ), ers; 11 Nov (1) Normandy Lake, CFC (B. J. Jenkins); 12 Nov (1 ad, 1 im) WDR (Chloe W. and Howell J. Peebles); 28 Nov (1 ad) Star Point Resort, PIC (Francis Baker); late Nov (1) Big Bottoms area, Cordell Hull Lake, Jackson Co. (fide Dale Massengill), found dead from gunshot, banded as a nestling in Michigan, 31 May 1987. Northern Harrier: 26 Aug (1) CCNWR (DWB), ers; 24 Oct (6) CCNWR (JCR), max. Rough-legged Hawk: 11 Nov (1) Woodlawn Rd., Fort Campbell area, Montgomery Co. (DWB), ers; 12 Nov (2) MOP (OBL, WNJ); only reports. Golden Eagle: 20 Oct (1) Giles Co., near Marshall Co. line (fide John L. Stokes), found

with gunshot wounds; taken to Cumberland Wildlife Foundation for rehabilitation; carried patagial tag and radio transmitter; hacked at Pigeon Mt., Walker Co., Georgia in 1987. Merlin: 17 Sep (1) Dover, SWC (JCR). Peregrine Falcon: 22 Sep (1) CCNWR (DWB); 2 Oct (1) CCNWR (DWB), lrs.

Grouse–Phalarope: RUFFED GROUSE: 18 Nov (1) Grassmere, DVC (*Walter A. Jones, Nicholas Young, Steve Young), good documentation submitted for this 1st DVC record. Sora: 29 Aug (6) BCWMA (DWB), ers and max. Sandhill Crane: 24 Sep (2) Burgess Falls Lake, Putnam Co. (John L. Stokes), ers; 2 Nov (10) BAH (RWS); 9 Nov (171) PIC (RCH), max; 13 Nov (109) PIC (RCH); 15 Nov (85) PIC (RCH); 22 Nov (18) BAH (RWS), lrs; total of 395 reported from 3 locations. Black-bellied Plover: 3 Sep (1) CCNWR (DWB), ers; 1 Oct (1) OHL, Sumner Co. (RYN, LFK, HCK), lrs. Lesser Golden-Plover: 18 Sep (2) CCNWR (JCR), only report for season. Semipalmated Plover: 4 Oct (1) CCNWR (JCR), lrs. Greater Yellowlegs: 8 Jul (1) CCNWR (JCR), ers; 12 Nov (2) MOP (OBL, WNJ), lrs. Lesser Yellowlegs: 29 Aug (36) CCNWR (DWB), max. Solitary Sandpiper: 2 Oct (1) CCNWR (DWB), lrs. Willet: 8 Jul (1) CCNWR (JCR), ers; 12 Nov (1) MOP (OBL, WNJ), lrs. Upland Sandpiper: 22 Sep (1) CCNWR (JCR), only report for season. Ruddy Turnstone: 30 Jul (2) CCNWR (DWB, JCR), 1st SWC record; 30 Aug (1) BCWMA (DWB), 2nd SWC record. Sanderling: 22 Aug (2) CCNWR (DWB), ers. Semipalmated Sandpiper: 5 Jul (1) CCNWR (JCR), ers. Western Sandpiper: 9 Jul (1) CCNWR (JCR), ers. Least Sandpiper: 29 Jun (2) CCNWR (JCR), ers. White-rumped Sandpiper: 22 Aug (2) CCNWR (DWB), only report. Baird's Sandpiper: 11 Sep (2) CCNWR (DWB), only report for season. Pectoral Sandpiper: 5 Jul (2) CCNWR (JCR), ers; 29 Sep (158) CCNWR (DWB), max; 18 Oct (2) CCNWR (DWB), lrs. Dunlin: 8 Nov (1) CFC (MDH), lrs. Stilt Sandpiper: 4 Jul (1) CCNWR (JCR), ers; 5 Sep (1) CCNWR (DWB), lrs. Buff-breasted Sandpiper: 21 Aug (2) GSP (CAS, JPC, DTC), ers; 22 Aug (1) CCNWR (DWB); 25 Aug (1) Todd's Lake, Rutherford Co. (TJW); 26 Aug (1) CCNWR (DWB), lrs; 4 reports from 3 locations for season, all falling within a 5-day period. Short-billed Dowitcher: 10–11 Jul (1–2) CCNWR (*JCR), ers; 31 Jul (1) CCNWR (*JCR), lrs. Long-billed Dowitcher: 30 Jul (1) CCNWR (*JCR), only report for season. Common Snipe: 24 Aug (4) BCWMA (DWB), ers. Wilson's Phalarope: 19 Aug (1) Todd's Lake, Rutherford Co. (TJW), ers; 25 Aug (1) CCNWR (DWB), lrs.

Gull–Tern: Ring-billed Gull: 1 Sep (1) Duck River Unit, Tennessee NWR, HPC (JCR), ers. Caspian Tern: 14 Jul (5) CCNWR (JCR), ers; 1 Oct (8) OHL, Sumner Co. (RYN, LFK, HCK), lrs and max. Forster's Tern: 8 Jul (3) CCNWR (JCR), ers; 19 Nov (1) CCNWR (CAS, JCR, m. ob.), lrs. Least Tern: 6 Aug (2) CCNWR (DWB), ers; 11 Aug (3) CCNWR (*JCR), max; 16–18 Aug (1–2) CCNWR (JCR). Black Tern: 16 Jul (2) CCNWR (JCR), ers; 2 Oct (1) OHL, Sumner Co. (RYN, LFK, HCK), lrs.

Dove–Flicker: COMMON GROUND-DOVE: Oct 1988 (1, **) CLA (fide DWB); 11th documented state record, window casualty taken to area taxidermist for mounting. Yellow-billed Cuckoo: 22 Oct (1) CLA (AHH), lrs. Short-eared Owl: 2 Oct (1) Metro Center, DVC (CGD), new fall arrival date for Nashville area; previous earliest date was 30 Oct 1953; 24 Oct (1) CCNWR (JCR), occurrence of this 2nd early fall date very notable. Ruby-throated Hummingbird: 14 Nov (1) Belle Meade, DVC (Ann Bryab, fide Susan M. Bell), new late departure date for Nashville area. Yellow-bellied Sapsucker: 2 Oct (1) MUC (Richard A. Figari), ers. Northern Flicker: 14 Sep (1, **) WSMV television tower (DFV), several wing, tail and body feathers were collected as part of the regular tower casualty collection project at this site. All of these feathers show salmon colored shafts that suggest the possibility of this specimen being of the Red-shafted subspecies; feathers were

inspected by Richard C. Banks of the National Museum, Washington, D.C., who reported that they matched well with specimens of Red-shafted Flickers in their collection; Dr. Banks hesitated to conclude that the feathers in question definitely came from a Red-shafted specimen, citing the possibility of a hybrid (these feathers are now part of the collection at the Warner Park Nature Center in Nashville).

Flycatcher–Vireo: Acadian Flycatcher: 30 Sep (2, b) LSC (GRM), lrs. Northern Rough-winged Swallow: 2 Oct (1) BWMA (DWB); 5 Oct (1) CCNWR (JCR), lrs. Red-breasted Nuthatch: 13 Oct (1) Dover fire tower, SWC (DWB); 27 Nov (1) Loretto, Lawrence Co. (Don K. and Donna N. Simbeck); only reports. Brown Creeper: 3 Oct (1) BAH (RWS), ers. Bewick's Wren: 24 Sep (1) Westvaco land, off Old Highway 18, SWC (DWB), only record for season. Winter Wren: 30 Sep (1) BAH (RWS), ers. Sedge Wren: 8 Aug (2) LBL (JCR, DWB), ers; 14 Aug (6) MOP (Mark H. Mayfield). Golden-crowned Kinglet: 3 Oct (1) BAH (RWS), ers. Ruby-crowned Kinglet: 3 Oct (1) BAH (RWS), ers. Blue-gray Gnatcatcher: 24 Sep (4) WSB (DWB), lrs. Veery: 5 Sep (1) BAH (RWS), ers. Swainson's Thrush: 14 Sep (30) BAH (RWS), max. Gray Catbird: 26 Oct (1) Love Hill, DVC (JCA), lrs. Water Pipit: 29 Oct (23) CCNWR (DWB), max. Cedar Waxwing: 9 Aug (nesting, 2 ad, 1 im) Lovelady Community, PIC (RCH). Solitary Vireo: 19 Oct (1) West Meade, DVC (CND, CRD); 20 Oct (1) CLA (AHH), only reports. Philadelphia Vireo: 18 Sep (1) LBL (JCR), ers; 18 Oct (1, b) LSC (GRM), lrs.

Warblers: Blue-winged Warbler: 10 Oct (1, b) COL (GRM), lrs. Golden-winged Warbler: 8 Sep (1) West Meade, DVC (CRD, CND), ers; 21 Sep (1) CLA (AHH), lrs. Tennessee Warbler: 11 Sep (1) WSB (DWB), ers; 7 Nov (1, b) COL (GRM), lrs. Orange-crowned Warbler: 7 Nov (1, b) COL (GRM), lrs. Nashville Warbler: 12 Sep (1) WSB (DWB), ers; 10 Oct (1, b) COL (GRM), lrs. Northern Parula: 18 Sep (1) CCNWR (JCR), lrs. Chestnut-sided Warbler: 27 Aug (2) CLA (AHH), ers; 20 Oct (1) CLA (AHH), lrs. Magnolia Warbler: 31 Aug (1) CFC (MDH), ers; 18 Sep (23) SWC (JCR); 20 Oct (1, b) COL (GRM), lrs. Black-throated Blue Warbler: 17 Sep (1 female) Pennington Bend, DVC (Margaret L. Mann), ers; 18 Sep (1 male) LBL (JCR); 2 Oct (1 male) RDL (CND, RCD), lrs. Yellow-rumped Warbler: 24 Sep (3) BWMA (DWB), ers; 29 Oct (50+) PIC (RCH), max. Black-throated Green Warbler: 5 Sep (1) WSB, ers; 29 Oct (1) CLA (AHH), lrs. Blackburnian Warbler: 7 Sep (2) BAH (RWS), ers; 2 Oct (2) BWMA (DWB), lrs. Mourning Warbler: 2 Oct (1) BWMA (DWB), only report for season. Wilson's Warbler: 2 Oct (1) Percy Warner Park, DVC (DFV), lrs.

Grosbeak–Siskin: Rose-breasted Grosbeak: 24 Nov (1, ph) Love Hill, DVC (F. Peck, fide *JCA), new Nashville Area late date, seen regularly at feeder until above date. Indigo Bunting: 20 Oct (1) CLA (AHH), lrs. Vesper Sparrow: 17 Oct (1) CCNWR (JCR), ers; 19 Oct (1) BWMA (DWB). Grasshopper Sparrow: 14 Nov (1, **) DVC (CGD), new Nashville Area late date, freshly killed—apparent window casualty, preserved as specimen in the Bierly collection. Lincoln's Sparrow: 9 Oct (1) CCNWR (DWB), only record for season. Bobolink: 4 Sep (10) CCNWR (DWB), ers. Northern Oriole: 24 Sep (1) WSB (DWB), lrs. Pine Siskin: 29 Oct (4) PIC (RCH), only report for season.

Locations: BAH—Barnes Hollow, Putnam Co.; BCWMA—Bear Creek WMA, Stewart Co.; BWMA—Barkley WMA, Stewart Co.; CCNWR—Cross Creeks NWR, Stewart Co.; CFC—Coffee Co.; CLA—Clarksville, Montgomery Co.; COL—Columbia, Maury Co.; DVC—Davidson Co.; FKC—Franklin Co.; GSP—Gallatin Steam Plant, Sumner Co.; HPC—Humphreys Co.; LBL—Land-Between-the-Lakes, Stewart Co.; LSC—Lewis Co.; MOP—Monsanto Ponds, Maury Co.; MUC—Maury Co.; OHL—Old Hickory Lake, Sumner Co.; PIC—Pickett Co.; RDL—Radnor Lake State Natural Area, Davidson Co.; SWC—Stewart Co.; WDR—Woods Res-

ervoir, Franklin Co.; WMC—Williamson Co.; WSB—Wiley's Spring Bay, Stewart Co.

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EASTERN RIDGE AND VALLEY REGION—Rainfall this season was near average to slightly above average (range 0.5 inches deficient at Johnson City to +2.75 inches at Chattanooga), but did not greatly diminish the long-term drought conditions plaguing the region. Temperatures were near normal during August and September. At Tricities Regional Airport, October temperatures were the coldest on record for that month, but conditions were apparently milder at Knoxville and Chattanooga. November temperatures were slightly above average. The remnants of Hurricane Gilbert passed through on 20 September (after pounding the western Gulf of Mexico), and almost certainly accounted for Tennessee's first Magnificent Frigatebird, and perhaps some of the shorebirds, gulls and terns seen in late September.

According to Bill Felts, TVA Manager of Reservoir Operations, "because of the drought conditions this was the first time TVA did not perform the weekly water-level fluctuations [of Chickamauga Lake] for their biological mosquito control operation." As a result of the full pool level, shorebirds and even long-legged waders were in reduced numbers, especially upstream at the Hiwassee River Area. However, "One possible side benefit of the stabilized water level and abundant aquatic 'weeds' was the first recorded nestings of the Pied-billed Grebe and Common Moorhen in the Sugar Creek section of HRA" (fide Ken Dubke). Many small ponds and marshes remained dry. Despite the drought, most seed and fruit crops were good.

Several rare species and some unusual concentrations were reported this season, as well as some notable absences and low numbers. There were good flights of loons, cormorants, cranes (reports incomplete) and terns; while most ducks and shorebirds were in low to fair numbers. Thrushes, other than Veery, were in improved numbers. Vireos and warblers were generally considered to be scarce. Only one Red-breasted Nuthatch and very few boreal finches indicate an off-year for these irruptive species.

The region's two banding stations reported below average capture rates. Chuck Nicholson banded 644 birds of 60 species in 32 days from 14 August to 6 November at Norris, while Rick Knight banded 430 birds of 45 species in 41 days from 2 September to 4 November at Austin Springs. Banding during August and September was very slow.

Loon–Heron: Red-throated Loon: 5–6 Nov (1) BOL (RLK). Common Loon: good flight; 21 Oct (3) BOL (BLC, RLK), ers; 29 Oct (37) CRL (RLK); 1 Nov (135) BOL (BLC), 3rd largest flock ever in JNC–Elizabethton area, max; 19 Nov (109) CHL (Elena S. Killian). Pied-billed Grebe: 14 Aug/4 Sep (pair with 5 yg) Sugar Creek, HRA (ARH, RDH/KHD, LHD), rare breeder in east Tennessee; 11 Nov (132) CHL (KHD, LHD), max. Horned Grebe: 21 Oct (6) BOL (BLC, RLK), ers; 24 Nov (58) CHL (KHD), max. Double-crested Cormorant: good flight; 27 Aug (1) KSP (KHD), ers; 11 Sep–19 Oct (1–10) AUS (RLK et al.); 16 Sep–5 Nov (1–19) BOL (BLC, GWS, MD, CFW, RLK); 17 Sep–EOP (1–12) FLL (MLD et al.); 25 Sep (36) KNC (KTOS), max; 29 Oct (2) CRL (RLK); 17 Nov (1) JNC (Richard D. Lura). MAGNIFICENT FRIGATEBIRD: 24 Sep (1 ad female, ph) CRL, Hamblen Co. portion (Joyce Haigh, fide JBO), 1st state record, seen a few days after Hurrican Gilbert, details to be published. American Bittern: 19 Sep (1) AUS (RLK); 26 Nov (1) HRA (KHD); only reports. Great Egret: low numbers in

CHA area due to high lake level, but several reports elsewhere; 4 Oct (31) AUS (RLK), most ever recorded in JNC area, max; 5/7 Nov (1/1) FLL/HRA (MLD/RLK, BLC, CFW), lrs. Little Blue Heron: 25–27 Aug (1) NIL (RJH); 28 Aug (1) McMinn Co. (ARH, RDH); 4 Sep (1) HRA (KHD, LHD). Cattle Egret: 6 Sep (1) AUS (RLK), only report. Green-backed Heron: 11 Nov (1) HRA (KHD), lrs. Black-crowned Night-Heron: 7 Aug (15) KSP (KHD); 16–27 Aug (3) NIL (RJH); 25 Aug (75+) CRL (RLK), max; 2 Sep–1 Oct (1–2) AUS (RLK); through 21 Oct (1–24) BOL (BLC et al.).

Waterfowl: Tundra Swan: 12–26 Nov (1 im) HRA (m. ob.). Snow Goose: 7 Nov–EOP (1–2 blue, 1–6 white) HRA (KHD, LHD et al.); 29 Nov (4 white, 8 blue) WBL (TWRA), max. BRANT: 5–7 Nov (1 im) CHL (KHD, m. ob.), about the 8th state record. Canada Goose: 9 Nov (1318) CHL & HRA (TWRA), max. Green-winged Teal: 4 Sep (2) KSP (ARH, RDH), ers; 11 Nov (518) HRA (KHD, LHD), max. American Black Duck: 29 Nov (359) HRA (TWRA), max. Mallard: 29 Nov (629) HRA (TWRA), max. Northern Pintail: 24 Nov (30) HRA (KHD, LHD), max. Blue-winged Teal: 4 Sep (65) KSP (KHD, LHD), max. Gadwall: 9 Sep (2) KSP (KHD, LHD), ers; 27 Nov (330) CHL (KHD, LHD), max. American Wigeon: 20 Nov (200) HRA (KHD, LHD), max. Canvasback: 20–26 Nov (18–30) HRA (KHD, LHD), largest number in CHA area in 10+ years; 28 Nov (5) BOL (RLK). Redhead: 29 Oct (2) CRL (RLK), ers; 1 Nov (12) BOL (GDE); 11/20 Nov (6/30) HRA (KHD, LHD); 27 Nov (8) CHL (KHD, LHD). Ring-necked Duck: 20 Nov (1,000) HRA (KHD, LHD), max. Greater Scaup: 24 Nov (40) CHL (KHD), max. Lesser Scaup: 6 Nov (115/160) CRL/CHL (RLK/KHD, LHD), max. Common Goldeneye: 24 Nov (5) CHL (KHD), max. Bufflehead: 9 Nov (50) WBL (TWRA), max. Hooded Merganser: 24 Nov (215) HRA (KHD, LHD), max. Red-breasted Merganser: 29 Oct (8) CRL (RLK), ers & max. Ruddy Duck: 17 Nov (18) BOL (RLK), large number for JNC area; 24 Nov (195) CHL (KHD, LHD), max.

Vulture–Crane: Vulture: 29 Oct (15 Black, 105 Turkey) CRL, Hawkins Co. portion (RLK), at roost. Osprey: 17 Nov (1) Roane Co. (CPN), lrs. Bald Eagle: 30 Sep (1 im) AUS (RLK); 6 Nov (1 ad, 1 im) CRL (RLK); "several reports from KNX area lakes" (fide CPN); all sightings should be reported. Northern Harrier: 3 reports in JNC area (RLK); only 1 report in KNX area (fide CPN). Sharp-shinned & Cooper's Hawk: near normal numbers reported. NORTHERN GOSHAWK: 9 Nov (1 im) Boone's Creek, WGC (BLC). ROUGH-LEGGED HAWK: "about Thanksgiving" (1 light phase) junction of I-81 & I-181 in Sullivan Co. (Greg McConnell fide FJA), rare in northeast Tennessee. Peregrine Falcon: 12 Aug (1) Cedar Creek, GNC (Don Holt fide FJA), "diving at herons;" 18 Sep (1) JNC (RLK), migrating with a kettle of Broad-winged Hawks; 1 Oct (1 im) AUS (RLK, BLC, JWB); 30 Nov (1) Raccoon Mountain Pumped Storage Station, Marion Co. (Lenny Kafka). Virginia Rail: 7 Oct (1) AUS (BLC, GWS), only report. Sora: no reports. COMMON MOORHEN: 7 Aug (1 ad with 4 yg) Sugar Creek, HRA (MWA), very rare breeder in east Tennessee. American Coot: 11 Oct (250) Norris Lake, Union Co. (CPN), unusually high number there; 11 Nov (1,500) CHL (KHD, LHD), max. Sandhill Crane: good number of reports from KNX area ("the best in several years") 2 Nov–7 Dec (at least 16 flocks totaling about 800 birds) Anderson, Hancock (24 on 7 Dec by Sam Venable is probably 1st county record), Meigs, Roane, Scott, Sevier Cos. & and KNC (fide CPN); 540 birds during Nov in CUC (RSD); KHD's annual crane survey not compiled at this writing, thus other records will be appended to the winter report.

Shorebirds: Lesser Golden-Plover: 20–25 Sep (1) AUS (RLK et al.); 1 Oct (1) BOL (MD, Joy Kyle). Piping Plover: 19–20 Aug (1) KSP (MWA, Boyd Sharp et

al.); 14–16 Sep (1) Boone Dam, WGC (BLC, RLK et al.), 1st JNC area record. American Avocet: 28 Aug (1) KSP (RJH); 23 Sep (1) AUS (BLC, MD, GWS, CFW). Greater Yellowlegs: 11 Nov (1) HRA (KHD, LHD), lrs. Spotted Sandpiper: 28 Oct (1) BOL (RLK), lrs. Sanderling: 13 Sep (1) EBF (CPN); 5–6 Nov (1) CHL (KHD et al.). Semipalmated Sandpiper: 13 Aug (50+) DOL (JAK), max. Western Sandpiper: 18 Aug (2) EBF (CPN); 23 Sep (4) AUS (BLC, MD, GWS, CFW). Least Sandpiper: 20 Nov (3) KSP (RLK, JWB), lrs. Baird's Sandpiper: 15 Sep (1) KSP (Albert M. Jenkins). Pectoral Sandpiper: 13 Aug (60) DOL (JAK), max; 12 Nov (5) HRA (JSL, BGM, Michael McMahan), lrs. Dunlin: 31 Oct–17 Nov (3) BOL (BLC et. al.); 5 Nov–EOP (max 82) HRA (KHD, LHD); 20 Nov (6) KSP (RLK, JWB). Buff-breasted Sandpiper: 18 Aug (2) EBF (Barry Fleming); 27–28 Aug (1) KSP (KHD, LHD, RJH). Short-billed Dowitcher: 27 Aug (1) NIL (RJH); 4 Sep (1) KSP (KDH). Common Snipe: 9 Sep (1) LST (BLC), ers; low numbers reported. American Woodcock: 15 Oct (3) GNC (W. Ruth Nevius).

Gull–Woodpecker: Laughing Gull: 20 Sep (1) CHL (RJH). Bonaparte's Gull: 29 Oct (1) CRL (RLK), ers. Ring-billed Gull: 25 Aug (12) CRL (RLK); 20 Sep (2) AUS (RLK), earliest JNC area record ever by 4 days. Herring Gull: 25 Sep (1 ad) AUS (RLK), ers. BLACK-LEGGED KITTIWAKE: 30 Nov (1 im) Fort Loudoun Dam, Loudon Co. (*RC), 7th state record. Caspian Tern: 27 Aug–4 Sep (2) KSP (KHD, LHD, JAK); 15/26 Sep (1) AUS (RLK); 17 Sep (2) NIL (RJH). Common Tern: 4 Sep (5) KSP (KHD, LHD); 5 Sep (1) NIL (RJH); 20 Sep (4) CHL (RJH); 24 Sep (96) FLL (MLD), record KNX area count; 5 Nov (1/1) Savannah Bay, HLC/HRA (KHD, LHD); above average showing. Forster's Tern: 13 Aug (6) BOL (RLK); 20 Aug–15 Sep (1–10) KSP (m. ob.); 27 Aug (4) CRL (RLK); 25 Sep (1) AUS (FJA); 15 Oct (1) KSP (ARH); 22 Nov (1) FLL (RC). Black Tern: 19 Aug–4 Sep (max 50 on 4 Sep) KSP (MWA, ARH et al.); 4 Sep (2/2) LST/AUS (RLK); 5 Sep (11) NIL (RJH); 20 Sep (3) CHL (RJH). Black-billed Cuckoo: 16 Sep (1) BOL (BLC, GWS); 20 Sep (1) AUS (RLK). Common Barn-Owl: yg fledged from a west KNC nest in mid Aug (fide JBO); fresh pellets regularly collected at 1 JNC site (FJA); early Nov (2) near Pikeville, Bledsoe Co. (Mark Patterson, TWRA), roosting in a barn. Common Nighthawk: 30 Sep (130) JNC (RLK), large number for that date; 4 Nov (1) JNC (RLK), latest ever in JNC area by 5 days. Red-headed Woodpecker: 27–28 Aug (3) CHA (RJH); 16 Sep–1 Oct (1) BOL (MD, GWS, CFW, BLC); 1 Oct (1) AUS (RLK, JWB, BLC); 2 Oct (1) Clairborne Co. (George W. McKinney); 8 Oct (1) GNC (fide Phine Britton).

Flycatcher–Waxwing: Yellow-bellied Flycatcher: 13 Sep (1, b) AUS (RLK). "Traill's" Flycatcher: 3–19 Sep (8, b) AUS (RLK), near average. Least Flycatcher: 5–30 Sep (6, b) AUS (RLK), slightly above average. Eastern Kingbird: 4 Sep (40) HRA (KHD), max. Tree Swallow: 6 Nov (1) FLL (MLD), lrs. Bank Swallow: 13 Aug (25) Nolichucky River, WGC (JWB). Cliff Swallow: 25 Sep (1) AUS (FJA), lrs. American Crow: 20 Nov (12,000) I-40 near CUC–Roane Co. line (Douglas B. McNair), at roost in young pines. Common Raven: 1, 9 Oct (1) AUS (RLK); 10, 11 Oct (1) BOL (BLC); low elevation sightings, probably same bird. Red-breasted Nuthatch: 15 Nov (1) NOR (CPN), only report. House Wren: 15 Nov (1) CHA (Robin Rudd), lrs. Marsh Wren: 8 Sep–1 Oct (1–2) AUS (RLK), only report. Ruby-crowned Kinglet: 21 Sep (1) JNC (BLC), ers; good numbers reported. Veery: 4 b at NOR, half long-term average (CPN). Gray-cheeked Thrush: 20 b at NOR, slightly above long-term average & well above last 2 years (CPN). Swainson's Thrush: 41 b at NOR, about equal to long-term average & double last year's rate (CPN). Hermit Thrush: 16 b at NOR, record high number (CPN); high numbers present late Oct–Nov in KNX & JNC areas (fide CPN, RLK). American Robin: 1 Oct (2,100 flying over house in 1 hour at dusk) JNC (RLK), max. Gray

Catbird: 18 Nov (2) JNC (GWS, CFW, BLC, MD), lrs. Water Pipit: 8 Oct (10) GNC (JAK), ers. Cedar Waxwing: 27 Aug (1 ad, 2 yg) KSP (KHD, LHD), continuation of summer breeding invasion.

Vireo–Warbler: White-eyed Vireo: 18 b at NOR, half the long-term average (CPN); well below average at AUS (RLK). Philadelphia Vireo: 18 Sep (1, b), NOR (CPN); 25 Sep (1) KNC (KTOS); 5 Oct (1) Blount Co. (JAK); 8 Oct (3) GNC (JAK). Red-eyed Vireo: very low numbers at NOR, especially during Aug when a notable passage is usually detected (CPN). Orange-crowned Warbler: late Oct (2 b & 2 other reports) NOR (CPN); 27 Oct (2) CHA (RJH). Yellow Warbler: 6, 9 Sep (2, b) AUS (RLK); 17 Sep (2) KSP (ARH), lrs. Magnolia Warbler: 18 b at AUS, record high number (RLK). Yellow-rumped Warbler: 29 Sep (3) AUS (RLK), ers; record high of 55 b at NOR (CPN). Palm Warbler: 5 b at AUS, well below long-term average (RLK). Cerulean Warbler: 26 Sep (1, b) AUS (RLK), seldom seen in fall. Ovenbird: 19 Oct (1, b) AUS (RLK), lrs. Northern Waterthrush: 7 b at AUS, about average (RLK). Mourning Warbler: 2–11 Sep (3, b) AUS (RLK), above average. Common Yellowthroat: 3 Nov (1) AUS (RLK), lrs. Wilson's Warbler: 7–30 Sep (7, b) AUS (RLK), above average; 14 Sep (1) CUC (RSD). Canada Warbler: 24 Sep (1) CHA (RJH), lrs.

Bunting–Grosbeak: Indigo Bunting: 16 Aug (nest with 3 small yg) Jonesborough, WGC (RLK), rather late. Vesper Sparrow: 1 Oct/29 Oct–4 Nov (1/2–4) AUS (RLK); 12 Nov (1) HRA (BGM). Savannah Sparrow: 4 Sep (3) LST (RLK), ers. Grasshopper Sparrow: 1 Oct (1) AUS (RLK, BLC, JWB), lrs. SHARP-TAILED SPARROW: 1 Oct (1) AUS (RLK, BLC, JWB). Lincoln's Sparrow: 26 Sep–19 Oct (7, b) AUS (RLK), above average; 11 Nov (1) Telford, WGC (BLC, GWS), latest ever in JNC area by 2 days; 23 Nov (1) CHA (RJH). Swamp Sparrow: 23 Sep (1) AUS (GWS, CFW, MD, BLC), ers; 32 b at AUS, about average (RLK). White-throated Sparrow: 29 Sep (1, b) AUS (RLK), ers. White-crowned Sparrow: 15 Oct (1) LST (BLC), ers. Bobolink: 30 Aug (5) EBF (CPN), ers; low numbers in KNX & JNC areas (fide CPN, RLK). Purple Finch: 10 Oct (10) BOL (BLC), ers; very scarce. Pine Siskin: 30 Nov (2) Signal Mountain, HLC (JSL), only report. Evening Grosbeak: no reports.

Addenda: Merlin: 1 spent winter of 1987–88 at Kingsport (George Larkin, ph. fide FJA).

Locations: AUS—Austin Springs, Washington Co.; BOL—Boone Lake, Sullivan & Washington Cos.; CHA—Chattanooga; CHL—Chickamauga Lake, mainly Hamilton Co.; CRL—Cherokee Lake, Hamblen & Hawkins Cos. portion; CUC—Cumberland Co.; DOL—Douglas Lake, Jefferson and Cocke Cos., EBF—Eagle Bend Fish Hatchery, Anderson Co.; FLL—Fort Loudoun Lake, mostly Knox Co.; GNC—Greene Co.; HLC—Hamilton Co.; HRA—Hiwassee River Area, primarily Meigs Co., but also Bradley, McMinn & Rhea Cos; JNC—Johnson City; KNC—Knox Co.; KNX—Knoxville; KSP—Kingston Steam Plant, Roane Co.; LST—Limestone, Washington Co.; NIL—Nickajack Lake, Hamilton Co.; NOR—Norris, Anderson Co.; WBL—Watts Bar Lake, Rhea & Roane Cos.; WGC—Washington Co.

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EASTERN MOUNTAIN REGION—Total rainfall for this 4-month period was near normal for the months involved, but the overall year's precipitation was still about 10 inches below normal. Temperatures in August and September were hotter than average, but October and November were normal. The first killing frost for the area came on 8 October, which is average for the period.

Sightings of birds of prey were more numerous than average, while waterfowl and shorebird sightings were considered below average. The winter finch arrival had not materialized by the end of the period (which is unusual) and only a very few scattered reports were received by this compiler.

Loon–Eagle: Common Loon: 6 Nov (18) WATL (GDE); 13 Nov (7) WATL (GOW). Pied-billed Grebe: 18 Sep (1) Ripshin Lake, CRC (GDE), ers. Double-crested Cormorant: 20 Oct (14) flying over Buffalo Mtn., WGC and 18 Nov (1) WATL (BLC et al.) Great Egret: 31 Aug (1) WATR (GOW). Tundra Swan: 30 Oct–8 Nov (1) WATR (GDE et al.). American Black Duck: 20 Nov (2) WIBL (GOW), ers, later than normal. American Wigeon: 21 Oct–EOP (3–5) WATR (GDE & CFW). Ring-necked Duck: 5 Nov (7) WIBL (GOW), ers. Lesser Scaup: 6–8 Nov (2) WIBL (GDE & CFW), ers. Bufflehead: 1 Nov (2) WIBL (GDE), ers. Hooded Merganser: 6 Nov (6) WATR (GOW); 18 Nov (4–5) WATR & Ripshin Lake, CRC (CFW). Black Vulture: 25 Sep (1) Eliz (GDE); 24 Oct (3) Siam Valley, CRC (CFW). 27 Oct (3) WIBL (GDE). Turkey Vulture: 10 Oct (1,000+) Townsend, BLC (Hedy Woods). Osprey: 30 Nov (1) WATL (RLK), late. Northern Harrier: 1 Oct (3) Eliz (LHTOS); 14 Oct (1) Buffalo Mtn. (BLC); 22 Oct (1) RzFm (GDE). Bald Eagle: 29 Sep (1) Look Rock, BLC (ARH); 22 Nov (1) RM (BLC).

Hawk–Swallow: Sharp-shinned Hawk: 8 separate reports during period, which is about average. Cooper's Hawk: 5 separate reports, which is average. NORTHERN GOSHAWK: 15 Aug (1) RM (Tom Laughlin); 2 Sep (1) Bristol (GDE); 1 Oct (1) Ripshin Mtn., CRC (FJA); 11 Nov (1) WATL (DJS). Red-shouldered Hawk: 3 Nov (2) Buffalo Mtn. (BLC). Broad-winged Hawk: 19 Sep (206) Buffalo Mtn. (BLC); 19 Sep (100) Erwin, Unicoi Co. (GWS). MERLIN: 11 Oct (1) Milligan College, WGC (GOW & Richard D. Lura). PEREGRINE FALCON: 24 Sep (1) Look Rock, BLC (RC, DJS); 29 Sep (1) Look Rock, BLC (ARH). Sanderling: 27 Aug (1) RC (FJA). Semipalmated Sandpiper: 21–27 Aug (1–3) RC (RLK, FJA). Western Sandpiper: 27 Aug (1) RC (FJA). Least Sandpiper: 21 Aug (2) RC (RLK). BAIRD'S SANDPIPER: 27 Aug (2) RC (FJA). Caspian Tern: 21 Aug (1) RC (RLK). Barred Owl: 31 Aug–8 Oct (1 regular) Hunter, CRC (GOW et al.). Common Nighthawk: 27 Aug (1) Grassy Ridge, RM, 1860 m elevation (EHS); 14 Oct (2) Gatlinburg (Michael Owens), late. Ruby-throated Hummingbird: 12 Oct (1) Eliz (GDE), lrs. Red-headed Woodpecker: 24 Sep (4) Look Rock, BLC (ARH, RC). Purple Martin: 23 Sep (1) Eliz (GDE); 24 Sep (1) Look Rock, BLC (ARH), both very late sightings. Northern Rough-winged Swallow: 22 Sep (2) RM, 1,765 m elevation (RLK).

Raven–Vireo: Common Raven: 1–5 regular on RM during period (LHTOS). Red-breasted Nuthatch: small numbers present on RM throughout period (LHTOS). Brown Creeper: 1 Oct (1) Unicoi Co. (GWS, SG), ers. Veery: 10 Sep (1) RM (GOW), lrs. Grey-cheeked Thrush: 26 Sep–9 Oct (5 separate sightings) Eliz area (LHTOS). Swainson's Thrush: very numerous during entire period; 1 Oct (60) Eliz Fall Count (LHTOS). Hermit Thrush: 20 Oct (4) Buffalo Mtn. (RLK), ers. Water Pipit: 22 Nov (2) RM (RLK). Cedar Waxwing: 10 Sep (2 ad feeding 3 yg) Heaton Creek, RM (RLK), late breeding record. Loggerhead Shrike: 8 Nov (1) Eliz (GOW). SOLITARY VIREO: 14 Oct (1 ad with downy yg) Clingmans Dome, Great Smoky Mountains National Park (Michael Owens), a very late breeding record (details should be published—ed.). Philadelphia Vireo: 1 Oct (2) RM (FJA).

Warbler–Grosbeak: Blue-winged Warbler: 10 Sep (1) RMSP (LHTOS). Golden-winged Warbler: 10 Sep (1) RMSP (LHTOS), lrs. ORANGE-CROWNED WARBLER: 1 Oct (1) RM (FJA). Black-throated Green Warbler: 20 Oct (2) Buffalo Mtn. (RLK), lrs. Palm Warbler: 10 Sep (1) RM (LHTOS), ers. Canada Warbler: 19 Sep (1) Erwin, Unicoi Co. (GWS), lrs. Blue Grosbeak: 1 Oct (1) Heaton Creek,

RM (FJA), lrs. Chipping Sparrow: 21 Nov (3) Eliz (GDE), lrs. Northern Oriole: 1 Oct (1) Eliz (Lois Herndon), lrs. Purple Finch: very scarce during end of Nov (LHTOS). Red Crossbill: 9 Nov (2) Buffalo Mtn. (RLK). Pine Siskin: 29 Oct (3) Townsend, BLC (JBO). Evening Grosbeak: 29 Nov (2–4) Pigeon Forge, Sevier Co. (JBO).

Locations: BLC—Blount Co.; CRC—Carter Co.; Eliz—Elizabethton area; RC—Roans Creek, Johnson Co.; RM—Roan Mountain, Carter Co.; RMSP—Roan Mountain S.P., Carter Co.; RzFm—Razor Farm, Carter Co.; WATL—Watauga Lake, Carter Co.; WATR—Watauga River, Carter Co.; WGC—Washington Co.; WIBL—Wilbur Lake, Carter Co.

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MATERIAL: The subject matter should relate to some phase of Tennessee ornithology. It should be original, factual, concise, and scientifically accurate.

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[VOL. 60, 1989] ACTUAL MAILING DATE: 11 JANUARY 1990

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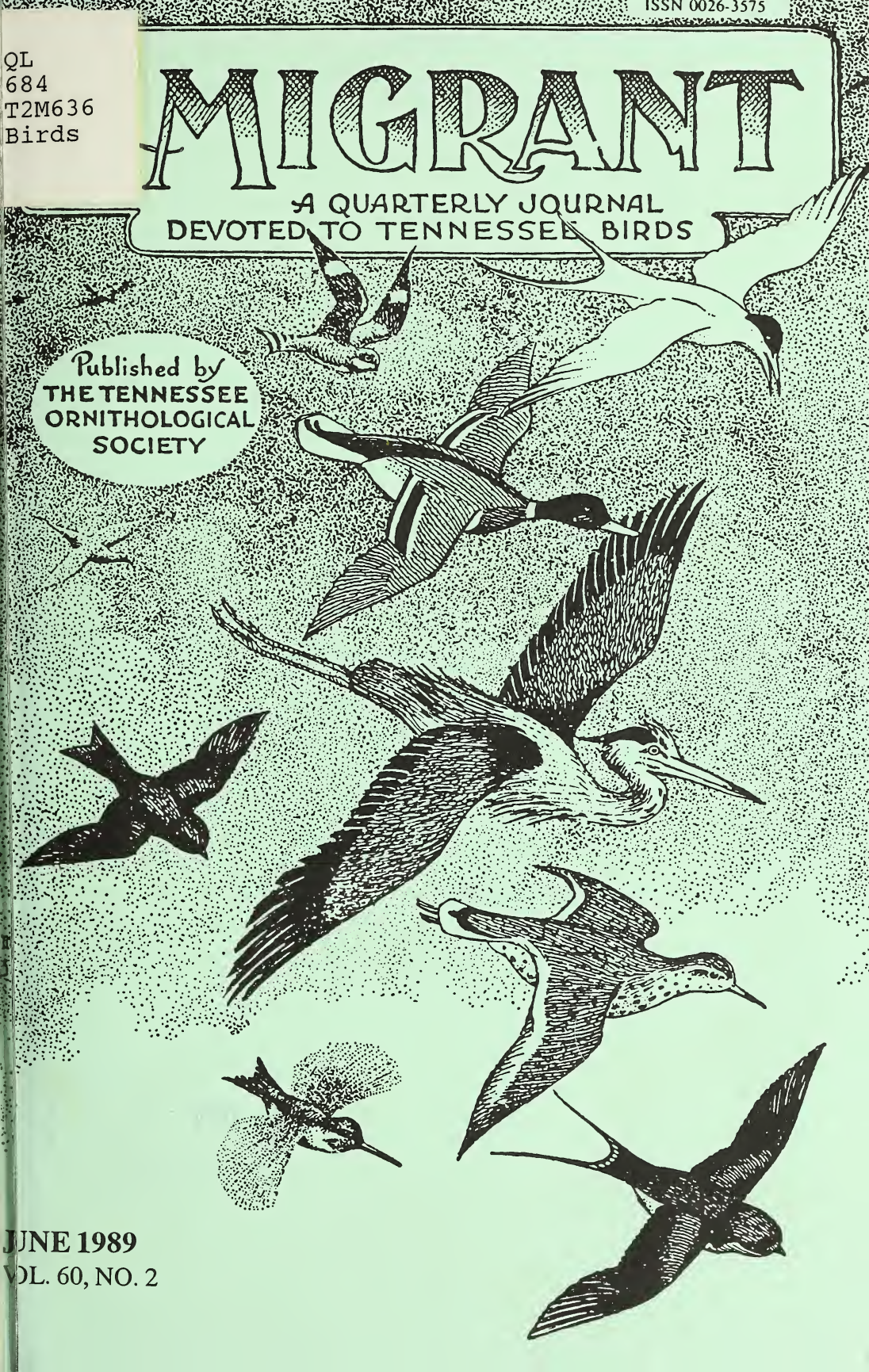
Birds

ISSN 0026-3575

MIGRANT

A QUARTERLY JOURNAL
DEVOTED TO TENNESSEE BIRDS



Published by
THE TENNESSEE
ORNITHOLOGICAL
SOCIETY

JUNE 1989
VOL. 60, NO. 2

THE MIGRANT

A QUARTERLY JOURNAL OF ORNITHOLOGY

FIRST ISSUE PUBLISHED IN JUNE 1930

PUBLISHED BY

THE TENNESSEE ORNITHOLOGICAL SOCIETY

Founded at Nashville, Tennessee on 7 October 1915
The T.O.S. is a non-profit, educational, scientific,
and conservation organization.

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Published quarterly (March, June, September, and December).
Printed by Tennessee Industrial Printing Services, Inc., 51 Miller Ave., Jackson, TN 38305.

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THE MIGRANT

Published by the Tennessee Ornithological Society,
to Record and Encourage the Study of Birds in Tennessee.
Issued in March, June, September, and December.

VOL. 60 JUNE 1989 NO. 2

The Migrant, 60(2):37–45, 1989

REELFOOT LAKE, TENNESSEE: SUMMER AND EARLY FALL BIRD OCCURRENCE, 1987

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In the early 1900's, bird species lists based on a season's study at Reelfoot Lake were occasionally published (e.g., Crook 1935, Ganier 1933, Pindar 1889, Whittemore 1937). However, recent records of summer bird life at Reelfoot have been published sporadically and are generally based on isolated, individual observations (e.g., Waldron 1987a). Pitts (1985) and work on the Tennessee Breeding Bird Atlas Project have recently provided more complete listings, although these were based on only a few visits during the breeding season. The purposes of this paper are to provide a list of birds found at Reelfoot Lake during summer and early fall of 1987, and to document relative abundance of each species. This information will permit a comparison with birds noted there during the early 1900's, and will provide baseline ecological data for future comparisons.

STUDY AREA

Reelfoot Lake lies in Lake and Obion Counties in northwest Tennessee. Some adjacent wetlands lie in Fulton County in southwest Kentucky. The lake was formed by a series of earthquakes on the New Madrid fault during the winter of 1811–1812. Presently, approximately 10,000 ha of the lake and surrounding forest are in government ownership. The lake is managed by three governmental agencies, the U.S. Fish and Wildlife Service (USFWS), the Tennessee Wildlife Resources Agency (TWRA), and the Tennessee Department of Conservation (TDOC).

Of the 10,000 ha encompassing Reelfoot Lake, approximately 5600 are open water. The remainder is bottomland hardwood forest, swamp forest and marsh. Dominant canopy species present in forested communities are typical of lower Mississippi River Valley wetlands. These species include baldcypress (*Taxodium distichum*), swamp chestnut oak (*Quercus michauxii*), sweetgum (*Liquidamber styracifolia*), hackberry (*Celtis occidentalis*), and cottonwood (*Populus deltoides*). Early botanical investigations of the area include Hazard (1933), Davis (1937), and Gersbacher and Norton (1939). The most recent botanical survey was by Guthrie (1987). Surrounding private land use is predominantly agricultural production.

METHODS

I made 68 trips onto the lake and into the surrounding forests from 11 June to 13 September 1987. Trips were made during all types of weather conditions, from approximately 0730 to 1300 CST. However, incidental observations were made at all hours. Forty-one (60%) of the trips were on pontoon boats along the Reelfoot Lake State Park boat routes; the boats departed from the Ellington Assembly Hall boat dock, travelled across the east end of Blue Basin, through Willow Bar Cutoff into Lost Pond, through Donaldson Ditch, along the southwest edge of Caney Island and Green Island, and returned to Ellington Hall. During the boat trips the boat engine was running most of the time; the noise of the engine may have prevented me from detecting some individuals. Although the boat roads cover a diversity of habitat types, most of the habitat covered is open water or open baldcypress forest. Most other areas of the lake were visited by boat and/or foot on the remaining 27 trips. These areas included marsh, bottomland hardwood and swamp forests, open water and edge habitats. An average of four days per week was spent in the field, ranging from two days per week (occurred twice) to six days per week (occurred twice). The trips were distributed monthly as follows: June — 14; July — 20; August — 17; September — 17.

During trips, bird species and numbers of individuals were constantly recorded on a checklist. Extremely high numbers of individuals and mobility of some species (e.g., flocking swallows) made counts unreliable on some trips. On these occasions, species were noted only as present or absent. During compilation of data, these notes were not included in the total number of individuals or the average number of individuals per trip, but they were included in the number of trips observed. Daily listing provided an accurate portrayal of species occurrence over an extended period of time, a crude index of relative abundance of common species, and occurrence of rare species.

RESULTS

More than 11,000 individuals of 88 bird species were observed (Appendix 1). Thirty-six species were summer residents, 34 were permanent residents, 10 were winter residents, and 8 were transients (residency status follows Waldron 1987b; Pitts unpublished). The most common orders represented were Passeriformes (39 species), Charadriiformes (9 species), Ciconiiformes (7 species), Falconiformes (7 species), and Piciformes (6 species).

Seven species were represented by more than 400 individuals during the course of the study, ranging from 405 Purple Martins (scientific names in Appendix 1) to 1864 Great Blue Herons. Because of repitition of counts on boat routes, individuals of some species were undoubtedly counted twice. Totals, therefore, reflect the same individual for some species (e.g. Osprey), and average per trip is a more accurate indicator of abundance. Six species were recorded on 60 or more trips, ranging from Red-bellied Woodpecker on 60 trips to Common Grackle, American Crow, and Great Blue Heron on 65 trips. Five species were recorded only once during the course of the study. This information is summarized in Table 1.

DISCUSSION

Reelfoot Lake has long been subject to ornithological investigation, with all observers listing a relatively high species richness. Pindar (1889) was perhaps the first to compile a species list for the area, listing 183 species for all seasons.

Table 1. Bird species with over 400 total individuals recorded, bird species seen on 60 or more trips and bird species seen only once on Reelfoot Lake, 1987.

Species		Species		Species
>400 individuals		Seen >60 trips		Seen once
Great Blue Heron	1864	Great Blue Heron	65	Black-crowned Night-Heron
Tree Swallow	863	American Crow	65	Green-winged Teal
Wood Duck	674	Common Grackle	65	King Rail
Common Grackle	644	Red-winged Blackbird	63	Broad-winged Hawk
Red-winged Blackbird	630	Carolina Wren	62	Brown Creeper
Rough-winged Swallow	415	Red-bellied Woodpecker	60	Red-breasted Nuthatch
Purple Martin	405			

Whittemore's (1937) summer study listed 116 species. More recently, Pitts (1985) compiled the Tennessee Ornithological Society's 1984 foray results. These observers listed 154 species on one May and one June weekend. I listed 88 species in my study (Appendix 1).

There are two logistical reasons for my study showing such a low number of species. First, all other authors include species found in habitats surrounding the lake, (e.g., Northern Bobwhite (*Colinus virginianus*) and Dickcissel (*Spiza americana*)). I did not include records of species seen off the lake. Second, others have concentrated more effort towards interior forest species. Because of the amount of time I spent on the boat routes, my records show a disproportionate occurrence of open water or edge species as compared to interior forest species.

I have grouped species into four categories for discussion. These are: (1) common and expected species; (2) "neglected" species; (3) species with unexpected occurances (by date); and (4) rare species (i.e., state or federally endangered). Pitts (1985) made a thorough comparison of the 1984 foray results with the results of Pindar (1889) and Whittemore (1937); therefore, I will not.

Common and expected species

Great Blue Herons are one of the most abundant species on the lake and certainly the most abundant Ciconiiform. Individuals commonly feed from exposed or submerged stumps. The heronry at Reelfoot Lake (Pitts 1982) is increasing in size every year (James Cox, Park Ranger, Reelfoot Lake State Park, pers. comm.). I visited the heronry on 26 June 1987. During my stay at least 11 (eleven) fish were regurgitated by birds in the colony. Seven of the fish were shad, three were crappie, and one was unidentified.

By the end of June many of the young fledged and began foraging with adults in Blue Basin. Numbers of individuals on Blue Basin gradually increased through the summer. I made counts with a 20x scope of Great Blue Herons on Blue Basin and found 128 on 26 July, 122 on 2 August, 224 on 23 August, 113 on 29 August, and 213 on 6 September. Other common species occurring at Reelfoot are listed in Table 1 (>400 individuals).

Neglected species

At least 17 species were under-represented in this study, encompassing six species of rails and 11 species of interior forest residents and migrants. Both groups were neglected because of logistical constraints. Although I was often in the right habitat, time did not allow for extensive searches. American Coots were observed on several dates in June and July around Forked Pond and Willow Bar Cutoff. In July, I observed on juvenile foraging with an adult. King Rails were observed on one date only, 15 September. Pitts (1985) emphasized the need for more study on all rail species found at Reelfoot Lake. Interior forest species were neglected as well. Most time spent birding in the interior forest was well after breeding season, when most species were quiet. Little time was spent in the interior forest during fall migration.

Species on unexpected dates

Six species occurred on unexpected dates. These were Common Tern, Ring-billed Gull, Herring Gull, Brown Creeper, Northern Harrier, and Double-crested Cormorant. Common Terns are fairly common transients in northwest Tennessee (Pitts unpublished). Five individuals were observed on 27 June. Prior to this observation, the latest early summer observation in west Tennessee was 3 June (Martha Waldron, pers. comm.). Ring-billed and Herring Gull observations in August were also unexpected. One Ring-billed Gull was observed on 23 August and 2 Herring Gulls were seen on 19 August. Both species are winter residents, typically arriving in Tennessee in October.

I observed one Brown Creeper in Old Cranetown on 11 June. This species is increasing its range in the Mississippi River Valley (Peterjohn 1985). One breeding record (Chriswell 1979) and several nesting season records (Ford 1987a) have occurred in west Tennessee the last few years. However, breeding season status of this species in west Tennessee remains unclear. One Northern Harrier was observed by Wally Cook and Charles Gagen on 7 July. This may be the only July record for this species in west Tennessee.

Double-crested Cormorants once nested commonly at Reelfoot Lake (Whittemore 1937). The last known nest was in 1960 in Old Cranetown (TWRA file "Reelfoot Lake"). In 1987 one cormorant was observed by TWRA personnel at Big Ronaldson Slough on 15 June. One other observation of possibly nesting individuals was on 27 June in Upper Blue Basin (Ford 1987b).

Rare species

Three species that are designated as either state (Tennessee) or federally endangered were observed. These are Least Tern (U.S. Fish and Wildlife Service 1985), Bald Eagle (federally endangered), and Mississippi Kite (state endangered). Least Terns nest on exposed sandbars in the Mississippi River. Open water areas of Reelfoot Lake were an important feeding area throughout the summer. I observed them on 47 of 68 trips, with a high count of 21 individuals on 2 August. During August, adults and young were observed on the lake on all but two days. None were seen on the lake in September.

Bald Eagles nested at Reelfoot Lake until 1960. Since that time the species has suffered population declines nationwide. The TWRA began a hacking project at Reelfoot Lake in 1981. In 1987, one adult was observed at Caney Island on 9 and 14 August and again on 15 September. One immature, thought to be a three-year old, was observed at the hacking towers on 15 August (Paul Harris, pers. comm.).

Sixteen Mississippi Kites were seen on 11 trips from 18 June to 30 August. All observations involved birds soaring or actively foraging from tree top level.

Other species observed that are listed by Eagar and Hatcher (undated) as threatened, in need of management, or of special concern are: Pied-billed Grebe, Double-crested Cormorant, Anhinga, Great Blue Heron, Great Egret, Little Blue Heron, Black-crowned Night-Heron, Yellow-crowned Night-Heron, Cattle Egret, Red-shouldered Hawk, Northern Harrier, American Coot, Fish Crow, Red-headed Woodpecker, and Swainson's Warbler.

ACKNOWLEDGEMENTS

I would like to thank several people for their assistance in this study. The personnel at Reelfoot Lake State Park were supportive of the work and contributed frequently to bird records. These people include Eddie Wilbanks, David Haggard, Wally Cook, Michael Walton, Jimmy Cox, and Steve Pardue. TWRA personnel, especially Paul Brown and Jim Johnson, were also helpful. Visitors to the lake often made helpful contributions; these people include Jim and Ann Nance, Paul Harris, and Kelly Christensen. I would also like to thank Martha Waldron and Dr. Ralph Dimmick for their review of an early draft of this paper.

LITERATURE CITED

Crook, C. 1935. The birds of late summer on Reelfoot Lake. J. Tenn. Acad. Sci. 10:1–18.

Chriswell, W.G. 1979. Brown Creepers nesting in west Tennessee. Migrant 50:81–82.

Davis Jr., J.H. 1937. Aquatic plant communities of Reelfoot Lake. J. Tenn. Acad. Sci. 12:96–103.

Eagar, D., and R. Hatcher. undated. Tennessee's rare wildlife, volume 1: the vertebrates. Tennessee Wildlife Resources Agency, Nashville.

Ford, R.P. 1987a. Summary of recent Brown Creeper observations in west Tennessee. Migrant 58:51–52.

Ford, R.P. 1987b. The breeding of Double-crested Cormorants in Tennessee. The Atlas Observer 1(2):6.

Ganier, A.F. 1933. Water birds of Reelfoot Lake, Tennessee. Tenn. Avifauna No. 2, Nashville.

Gersbacher, E.O. and E.M. Norton. 1939. A typical plant succession at Reelfoot Lake. J. Tenn. Acad. Sci. 14:230–238.

Guthrie, M. 1987. The rare plants and flora of Reelfoot Lake. Tenn. Department of Conservation, Nashville.

Hazard, J.O. 1933. The trees of the Reelfoot Lake region. J. Tenn. Acad. Sci. 8:55–60.

Peterjohn, B.G. 1985. The changing season. American Birds 38:1025.

Pindar, L.O. 1889. List of the birds of Fulton county, Kentucky. Auk 6:310–316.

Pindar, L.O. 1925. Birds of Fulton county, Kentucky. Wilson Bull. 37:77–88, 163–169.

Pitts, T.D. unpublished. A preliminary list of northwest Tennessee birds. University of Tennessee, Martin.

Pitts, T.D. 1982. Establishment of a new heron and egret colony at Reelfoot Lake, Tennessee. Migrant 53:63–64.

Pitts, T.D. 1985. The breeding birds of Reelfoot Lake, Tennessee. Migrant 56(2):29–41.

U.S. Fish and Wildlife Service. 1985. Interior population of the Least Tern determined to be endangered. Federal Register 50:21784–21792.

Waldron, M.G. 1987a. The season — western coastal plain region. Migrant 58:19–21, 52–54, 92–93.

Waldron, M.G. 1987b. Seasonal occurrences of Shelby county, Tennessee birds. Tennessee Ornithological Society, Memphis.

Whittemore, W.L. 1937. Summer birds of Reelfoot Lake. J. Tenn. Acad. Sci. 12:114–128.

Accepted 27 December 1988.

Appendix 1. Bird species occurrence on Reelfoot Lake based on 68 trips from June 11 through September 30, 1987, including number of trips observed, total number of individuals, average number per trip, and residency status.

Species	Number of trips[1]	Total individuals[2]	Average per trip[3]	Inclusive dates (status)[4]
Pied-billed Grebe (*Podilymbus podiceps*)	2	2	.03	8/10, 9/25 (PR)
Double-crested Cormorant (*Phalacrocorax auritus*)	31	155	2.28	6/15–9/30 (T)
Anhinga (*Anhinga anhinga*)	5	8	.21	6/18–7/2 (SR)
Great Blue Heron (*Ardea herodias*)	65	1864	27.41	6/11–9/30 (PR)
Great Egret (*Casmerodius albus*)	37	127	1.87	6/11–9/30 (SR)
Little Blue Heron (*Egretta caerulea*)	23	52	.76	6/11–9/4 (SR)
Cattle Egret (*Bubulcus ibis*)	3	48	.71	7/25, 8/1, 9/13 (SR)
Green-backed Heron (*Butorides striatus*)	24	62	.91	6/21–9/16 (SR)
Black-crowned Night-Heron (*Nycticorax nycticorax*)	1	1	.01	9/11 (SR)
Yellow-crowned Night-Heron (*Nycticorax violaceus*)	5	6	.09	6/15–9/13 (SR)
Wood Duck (*Aix sponsa*)	53	674	9.92	6/12–9/30 (PR)
Green-winged Teal (*Anas crecca*)	2	4	.01	9/12, 9/13 (WR)
Mallard (*Anas platyrhynchos*)	56	317	4.66	6/11–7/30 (PR)
Blue-winged Teal (*Anas discors*)	9	166	2.44	8/9–9/30 (WR)
Gadwall (*Anas strepera*)	2	22	.32	9/3–9/13 (WR)
American Wigeon (*Anas americana*)	1	18	.26	9/25 (WR)
Osprey (*Pandion haliaetus*)	24	60	.88	6/20–9/30 (SR)
Mississippi Kite (*Ictinia mississippiensis*)	11	16	.24	6/18–8/30 (SR)
Bald Eagle (*Haliaeetus leucocephalus*)	4	4	.06	8/9–9/15 (WR)
Northern Harrier (*Circus cyaneus*)	1	1	.01	6/18 (WR)
Red-shouldered Hawk (*Buteo lineatus*)	34	46	.68	6/16–9/25 (PR)
Broad-winged Hawk (*Buteo Platypterus*)	1	1	.01	8/13 (SR)

Appendix 1. Continued

Species	Number of trips	Total individuals	Average per trip	Inclusive dates (status)
Red-tailed Hawk (*Buteo jamaicensis*)	3	4	.06	6/19–8/31 (PR)
Wild Turkey (*Meleagris gallopavo*)	3	8	.12	6/9–7/2 (PR)
King Rail (*Rallus elegans*)	1	1	.01	9/15 (SR)
American Coot (*Fulica americana*)	18	52	.76	6/19–9/30 (PR)
Killdeer (*Charadrius vociferus*)	12	55	.81	6/11–9/13 (PR)
American Woodcock (*Scolopax minor*)	2	3	.04	9/3–9/15 (PR)
Ring-billed Gull (*Larus delawarensis*)	3	12	.18	8/23–9/19 (WR)
Herring Gull (*Larus argentatus*)	1	2	.03	8/19 (WR)
Caspian Tern (*Sterna caspia*)	10	17	.25	8/9–9/30 (T)
Common Tern (*Sterna hirundo*)	3	13	.19	6/27, 8/8, 8/9 (T)
Forster's Tern (*Sterna forsteri*)	6	25	.37	8/14–9/25 (T)
Least Tern (*Sterna antillarum*)	47	133	.96	6/11–8/30 (SR)
Black Tern (*Childonias niger*)	10	58	.85	7/23–8/23 (T)
Mourning Dove (*Zenaida macroura*)	20	62	.91	6/11–9/15 (PR)
Yellow-billed Cuckoo (*Coccyzus americanus*)	41	70	1.03	6/11-9/15 (SR)
Great Horned Owl (*Bubo virginianus*)	3	5	.07	9/13–9/20 (PR)
Barred Owl (*Strix varia*)	25	48	.71	6/11–9/16 (PR)
Chimney Swift (*Chaetura pelagica*)	25	92	1.35	6/11–9/15 (SR)
Ruby-throated Hummingbird (*Archilochus colubris*)	35	45	.66	6/11–9/15 (SR)
Belted Kingfisher (*Ceryle alcyon*)	40	84	1.24	6/11–9/30 (PR)
Red-headed Woodpecker (*Melanerpes erythrocephalus*)	33	64	.94	6/16–9/13 (PR)
Red-bellied Woodpecker (*Melanerpes carolinus*)	60	171	2.51	6/11–9/23 (PR)
Downy Woodpecker (*Picoides pubescens*)	55	201	3.01	6/11–9/25 (PR)
Hairy Woodpecker (*Picoides villosus*)	8	7	.10	7/26–9/13 (PR)

Appendix 1. Continued

Species	Number of trips	Total individuals	Average per trip	Inclusive dates (status)
Northern Flicker (*Colaptes auratus*)	8	8	.12	7/1–9/25 (PR)
Pileated Woodpecker (*Dryocopus pileatus*)	52	108	1.59	6/11–9/30 (PR)
Eastern Wood-pewee (*Contopus virens*)	53	92	1.35	6/15–9/24 (SR)
Acadian Flycatcher (*Empidonax virescens*)	44	109	1.60	6/11–9/25 (SR)
Great Crested Flycatcher (*Myiarchus crinitus*)	29	75	1.10	6/11–9/13 (SR)
Eastern Kingbird (*Tyrannus tyrannus*)	6	10	.15	6/16–7/19 (SR)
Purple Martin (*Progne subis*)	40	405	5.96	6/11–8/30 (SR)
Tree Swallow (*Tachycineta bicolor*)	34	863	12.69	6/20–9/30 (SR)
Northern Rough-winged Swallow (*Stelgidopteryx serripennis*)	37	415	6.10	6/27–9/25 (SR)
Barn Swallow (*Hirundo rustica*)	51	272	4.00	6/11–9/25 (SR)
Blue Jay (*Cyanocitta cristata*)	55	125	1.84	6/11–9/30 (PR)
American Crow (*Corvus brachyrhynchos*)	65	205	3.01	6/11–9/30 (PR)
Fish Crow (*Corvus ossifragus*)	14	35	.51	6/11–9/30 (PR)
Carolina Chickadee (*Parus carolinensis*)	56	174	2.56	6/11–9/30 (PR)
Tufted Titmouse (*Parus bicolor*)	58	197	2.90	6/11–9/25 (PR)
Red-breasted Huthatch (*Sitta canadensis*)	1	1	.01	9/30 (WR)
White-breasted Nuthatch (*Sitta carolinensis*)	24	27	.40	6/11–9/25 (PR)
Brown Creeper (*Certhia familiarus*)	1	1	.01	6/11 (WR)
Carolina Wren (*Thryothorus ludovicianus*)	62	219	3.22	6/11–9/30 (PR)
Blue-gray Gnatchatcher (*Polioptila caerulea*)	41	130	1.91	6/11–9/13 (SR)
European Starling (*Sturnus vulgaris*)	24	167	2.46	6/12–9/13 (PR)
White-eyed Vireo (*Vireo griseus*)	26	62	.91	6/11–9/16 (SR)
Yellow-throated Vireo (*Vireo flavifrons*)	2	2	.03	6/19–7/3 (SR)
Red-eyed Vireo (*Vireo olivaceus*)	16	25	.37	6/12–9/12 (SR)

Appendix 1. Continued

Species	Number of trips	Total individuals	Average per trip	Inclusive dates (status)
Northern Parula (*Parula americana*)	14	27	.40	6/11–9/30 (SR)
Black-throated Green Warbler (*Dendroica virens*)	1	1	.01	9/12 (T)
Yellow-throated Warbler (*Dendrioca dominica*)	28	57	.84	6/11–8/10 (SR)
Cerulean Warbler (*Dendroica cerulea*)	1	2	.03	6/19 (SR)
Black-and-White Warbler (*Mniotilta varia*)	1	1	.01	8/30 (T)
American Redstart (*Setophaga ruticilla*)	1	1	.01	6/19 (SR)
Prothonotary Warbler (*Prothonotaria citrea*)	43	139	1.91	6/11–9/13 (SR)
Swainson's Warbler (*Limnothlypis swainsonii*)	1	1	.01	7/3 (SR)
Louisiana Waterthrush (*Seiurus motacilla*)	3	3	.04	6/16–7/21 (SR)
Common Yellowthroat (*Geothlypis trichas*)	29	92	1.35	6/13–9/13 (SR)
Summer Tanager (*Piranga rubra*)	28	46	.68	6/11–9/13 (SR)
Northern Cardinal (*Cardinalis cardinalis*)	59	356	5.23	6/11–9/25 (PR)
Indigo Bunting (*Passerina cyanea*)	34	105	1.54	6/11–9/14 (SR)
Red-winged Blackbird (*Agelaius phoeniceus*)	63	630	9.26	6/11–9/30 (PR)
Common Grackle (*Quiscalus quiscula*)	65	644	9.41	6/11–9/30 (PR)
Brown-headed Cowbird (*Molothrus ater*)	55	137	2.01	6/11–9/11 (PR)
American Goldfinch (*Carduelis tristis*)	33	127	1.87	6/11–9/15 (PR)
House Sparrow (*Passer domesticus*)	18	107	1.57	6/12–9/13 (PR)

1. Number of trips the species was observed out of a total of 68 trips.
2. Total number of individuals is totaled over all trips.
3. Average is total number of individuals divided by total number of trips.
4. Inclusive dates are those dates the species was first and last seen. Status denotes residency, taken from Waldron (1987) and Pitts (unpublished). Codes are as follows:
   PR — Permanent resident
   SR — Summer resident
   WR — Winter resident
   T — Transient

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1989 SPRING FIELD DAYS

Damien J. Simbeck

Nine counts were conducted across Tennessee, tallying a total of 199 species. As usual, the counts varied from single to multiple day counts and single to multiple county areas. Therefore, little comparison can be made from count to count. Most notable this year were Laughing Gull and Red-cockaded Woodpecker at Chattanooga, the latter being found on a special field trip to Polk county during the TOS spring meeting. Also notable were American Bittern on 2 counts, Barn-Owl on 3, Least Flycatcher, Bewick's Wren on 2, and all species of vireos and warblers, including 2 counts with Connecticut and 2 with Swainson's. Unfortunately, the trend of reporting unusual species without details continues. The best example this year is the report of Long-billed Dowitchers on two counts without so much as a note.

Several counts from 1988 were received too late to be included in last year's report. These counts add three species to last year's totals. They are indicated by an "8" in the count name. As usual, the counts are tallied from west to east.

INFORMATION ON THE COUNTS

MEMPHIS — 30 April; 0700–2000; partly cloudy to overcast; wind S 10-20 mph; temp 65-80 F; Shelby Forest S.P. in A.M., Penal Farm, Ensley and Robco Lake in P.M. 29 observers, Martha Waldron (compiler — 1626 Yorkshire Dr., Memphis 38119). Dowitchers reported as Long-billed (1), Short-billed (2), but no details on Long-billed submitted.

MONTGOMERY COUNTY 1988 — 7-8 May; mainly A.M.; clear; temp 60–80 F; 6 observers, Michael Dinsmore, Mayme Dinsmore, Annie Heilman, John Quick (compiler — Rt. 1 Box 114B, Cunningham 37052), David Snyder, Ellen Walker.

COLUMBIA — 28-29 April; partly cloudy; wind var. SW 0-10 mph; temp 60-90 F; 13 observers, Daniel Gray Jr., George (compiler — 999 Sunnyside Dr., Columbia 38401) and Cleo Mayfield, William Jernigan, Allen and Dianne Pressnell, Brad and Lloydina Hammond, Jane Oakes, Allyn Lay, Karen Stephens, Anne and Bedford Lochridge.

MURFREESBORO — 29-30 April; Saturday — partly cloudy; temp 65-80 F; Sunday — rain in P.M.; temp 60-75 F; 22 hours, 188 miles; 11 observers, Josephine Candrell, Bertha Chrietzberg, C.E. Greever, Edith Hayes, Anne (compiler — Murfreesboro) and Bob Hettish, Richard and Wilma Hunter, Gene and Ruth Odom, John Patten.

MURFREESBORO 1988 — 7-8 May; wind 5-8 mph, temp 75-83 F; 32 hours, 269 miles (35 miles by boat); 17 observers, Bertha and Jim Chrietzberg, Bill and Lou Erwin, C.E. Greever, Edith Hayes, Anne (compiler) and Bob Hettish, Richard and Wilma Hunter, David McCarroll, Pat McCauley, Gene and Ruth Odom, John Patten, Alberta Spence, Terry Witt.

LEBANON — 29-30 April; 0530-2100; partly cloudy; temp 65-83 F; 208 miles by car, 2 on foot, 1 hour owling; 10 observers, E.C. and V.C. Berry, Frank and Norma Crawfo and Ruth (compiler — Rt. 2, Box 141, Lascassas 37085) McMillan, Kay and Larry Norris, Ann Reese, Jo Rook.

Good details for Least Flycatcher.

LEBANON 1988 — 7-8 May; clear; temp 50-83 F; 12.5 hours; 12 observers in 6 parties; Earline and Vernon Berry, Jean Callis, Carolyn Evans, Mildred Gaston, Tim Gorman, Kay and Larry Norris, Ruth McMillan (compiler), Ray Pope, Anne Reese, Melissa Tucker.

Good details for Common Barn-Owl and Swainson's Warbler.

HIGHLAND RIM — 29 April; partly cloudy with some rain; temp 67-75 F; 47.5+ hours, 415+ miles by car, 20+ miles on foot; 17 observers, Nicky Medley (compiler — Rt. 2, Box 173B, Hillsboro 37342).

Good details for Connecticut Warbler. Dowitchers were reported as Long-billeds, but no details submitted.

CHATTANOOGA (1989 TOS Spring Meeting) — 6-7 May; Ken Dubke (compiler — 8139 Roy Lane, Ooltewah 37363).

CHATTANOOGA 1988 — 7 May; 0600-1900; clear; 22.5 hours, 100 miles by car, 20 on foot; 14 observers, Ralph Brown, Bob Crawford (co-compiler — P.O. Box 613, Hixon 37343), Linda Collins, Kenton Dickerson, Ken (co-compiler) and Lil Dubke, Gertrude Fleming, Al Jenkins, Ross Kinderman, Barbara and Mike McMahan, David and Tom Patton, Charlie Tucker.

KNOXVILLE — 30 May; clear with P.M. thunderstorms; temp 57-84 F; 84 hours, 297 miles by car, 46 on foot; 26 observers, Jane Beintema, Jim and Betty Reid Campbell, Howard Chitwood, Marcia Davis, Louise Fuller, Robert Hall, Ron (compiler — 4523 McCloud Rd., Knoxville 37938) and Audrey Hoff, Susan Hoyle, Tony Koella, Beth Lacy, Bill and Alison McNutt, Gay Norton, Chuck Nicholson, Holly Overton, Truett Patterson, Don Powers, Mark Reeves, Martha Rudolph, Michael Ryon, Boyd Sharp, Jim Tanner, Craig Walker, Ralph Zaenglein.

GREENEVILLE-29 April; 0600-2130; cloudy with rain; wind SW 5-13 mph; temp 54-79 F; 25.75 hours by car, 25.25 on foot, 4 by boat, .75 owling and 12 at feeders, 389 miles by car, 12.25 on foot, 4 by boat and .5 owling. 19 observers, Ben, Mark, Orland and Phine Britton, Justino Carlos, Margaret Gaut, Juanita and Leonard Heckert, Don and Jim (compiler — 311 Colonial Circle, Greeneville 37743) Holt, Cindi Jones, Richard and Willie Ruth Nevius, Daniel Nieves, Joanne and Larry Routledge, Helen and Royal Spees, Virginia Williams.

GREENEVILLE 1988 — 16 April; 0730-0830; mostly to partly cloudy; wind SW 5-10 mph; temp 47-65 F; 42 hours by car, 12 on foot, 2.25 by boat, and 19.75 at feeders, 202 miles by car, 15 on foot, 4 by boat. 26 observers, Orland and Phine (compiler — 1750 Gott Dr., Greeneville 37743) Britton, Tio and Violet Carlos, Marjorie Earnest, King and Margaret Gaut, Juanita and Lenard Heckert, Jim Holt, Rena Johnson, Dan and Kay Nieves, Richard and Willie Ruth Nevius, Linda and Roy Northrop, Doug Ratledge, Jo Ann and Larry Routledge, Fred Simpson, Helen and Royal Spees, George and Jean Weaver, Virginia Williams.

ELIZABETHTON — 29 April; 0330-2130; cloudy, with inter rain; temp 59-71 F; 72 hours; 17 observers, Cat Bireley, Janet Brown, Linda Campbell, Brian Cross, Hal and Martha Dillenbeck, Elizabeth Funkhouser, Sally Goodin, Rick Knight (compiler — 804 N. Hills Dr., Johnson City 37604), Richard Lewis, Dick Lura, John Martin, Perry McDormond, Lynn Ray, Glenn Swofford, Gary Wallace, Frank Ward.

Good details for Olive-sided Flycatcher.

TABLE 1. 1989 Spring Counts

	Memp	Mon8	Colu	Murf	Murf8	Leba	Leb8	High	Chat	Cha8	Knox	Gree	Gre8	Eliz
Common Loon	—	—	—	—	—	—	1	—	1	—	—	—	—	2
Pied-billed Grebe	—	—	2	—	—	—	2	2	1	—	—	—	—	—
Double-cr. Cormorant	34	—	—	—	—	—	36	30	1	1	7	—	—	—
American Bittern	1	—	—	1	—	—	—	—	—	—	—	—	—	—
Great Blue Heron	36	2	6	2	—	1	14	41	13	24	10	3	1	2
Great Egret	1	—	—	—	1	—	—	—	1	—	—	—	—	—
Snowy Egret	1	—	—	—	—	—	—	—	—	—	—	—	—	—
Little Blue Heron	2	—	—	—	2	—	—	—	—	—	—	—	—	—
Cattle Egret	15	—	—	3	—	—	—	—	—	—	—	—	—	—
Green-backed Heron	5	5	12	8	15	2	12	2	8	2	3	8	3	10
Black-cr. Night-Heron	—	1	1	—	—	—	12	—	—	—	2	—	—	—
Yellow-cr. Night-Heron	6	—	—	—	—	—	1	—	2	1	—	—	—	—
Snow Goose	—	—	—	—	—	—	—	—	—	—	—	—	2	—
Canada Goose	—	—	108	52	32	5	50	42	112	40	13	50	64	44
Wood Duck	17	3	15	6	4	—	12	17	3	4	13	43	—	50
Green-winged Teal	—	—	5	—	—	—	—	—	—	—	—	—	—	—
American Black Duck	—	2	—	—	—	—	—	—	—	—	—	4	6	—
Mallard	10	—	4	1	2	—	2	7	8	15	—	12	19	29
Blue-winged Teal	24	—	29	—	3	—	7	7	—	—	—	2	2	4
Gadwall	—	—	2	—	—	—	—	—	—	—	—	—	—	—
Ring-necked Duck	—	—	—	—	—	—	—	—	—	—	—	—	—	1
Hooded Merganser	1	—	—	—	—	—	—	—	—	—	—	—	—	—
Red-br. Merganser	5	—	—	—	—	—	—	1	1	—	—	—	—	6
Ruddy Duck	4	—	—	—	—	—	—	—	—	—	—	—	—	—
Black Vulture	—	—	62	11	40	5	19	21	5	21	—	25	1	—
Turkey Vulture	—	6	25	4	15	23	33	28	20	8	7	20	76	8
Osprey	—	1	1	—	—	—	—	1	3	3	—	1	3	2
Mississippi Kite	46	—	—	—	—	—	—	—	—	—	—	—	—	—
Bald Eagle	—	—	—	—	—	—	—	—	—	1	—	—	—	—
Northern Harrier	1	—	—	—	—	—	—	—	—	—	—	1	2	—
Sharp-shinned Hawk	—	1	—	—	—	—	1	—	1	2	—	1	6	—
Cooper's Hawk	—	—	—	1	—	—	—	—	1	—	1	—	4	—
Red-shouldered Hawk	4	4	2	—	—	—	2	—	2	2	2	—	—	—
Broad-winged Hawk	4	—	4	—	—	—	—	—	1	5	8	—	3	4
Red-tailed Hawk	8	7	7	12	20	6	6	10	1	2	5	3	7	3
American Kestrel	2	3	22	22	31	5	9	7	1	1	3	12	9	7
Ruffed Grouse	—	—	—	—	—	—	—	—	—	—	1	1	—	5
Wild Turkey	4	—	—	—	—	—	—	1	—	—	—	—	—	—
Northern Bobwhite	4	12	43	13	124	13	16	13	1	17	39	32	26	14
Virginia Rail	—	—	1	—	—	—	—	2	—	—	—	—	—	—
Sora	4	—	6	—	—	—	—	—	1	—	—	—	—	—
American Coot	4	—	3	—	4	—	3	6	1	50	22	—	—	2
Semipalmated Plover	4	—	—	—	—	—	—	—	1	—	—	—	—	—
Killdeer	47	14	57	25	38	40	22	25	2	5	22	28	20	30
Greater Yellowlegs	4	3	3	—	3	—	2	10	1	—	—	—	2	—
Lesser Yellowlegs	83	—	16	2	5	2	1	25	1	—	—	—	—	1
Solitary Sandpiper	65	1	28	10	10	1	10	4	3	3	5	14	1	14
Spotted Sandpiper	3	5	2	10	9	—	14	8	9	1	2	5	—	9
Semipalmated Sandpiper	1	—	—	—	—	3	—	—	—	—	—	—	—	—
Least Sandpiper	110	—	3	—	1	—	—	—	8	—	1	—	1	—
Pectoral Sandpiper	420	2	10	—	—	—	—	5	—	—	—	—	—	—
Stilt Sandpiper	1	—	—	—	—	—	—	—	—	—	—	—	—	—
dowitcher sp.	3*	—	—	—	—	—	—	15*	—	—	—	—	—	—
Common Snipe	13	—	5	—	—	—	2	5	1	—	7	2	—	5
American Woodcock	—	—	1	—	—	—	—	—	—	—	—	—	—	2
Laughing Gull	—	—	—	—	—	—	—	—	1*	—	—	—	—	—
Ring-billed Gull	3	—	—	—	—	2	23	3	15	12	14	—	—	23
Herring Gull	—	—	—	—	—	—	2	—	—	—	—	—	—	—
Forster's Tern	—	—	—	—	—	—	6	—	—	—	—	—	—	1
Rock Dove	12	69	10	14	90	5	32	139	4	4	240	58	52	85

TABLE 1. 1989 Spring Counts, Continued

	Memp	Mon8	Colu	Murf	Murf8	Leba	Leb8	High	Chat	Cha8	Knox	Gree	Gre8	Eliz
Mourning Dove	46	83	70	186	93	56	68	50	31	44	247	235	137	160
Black-billed Cuckoo	—	—	—	—	—	—	2	—	2	2	—	5	—	—
Yellow-billed Cuckoo	2	9	5	7	12	1	6	2	3	8	17	1	—	1
Common Barn-Owl	3	—	—	1	—	—	1*	—	—	—	—	—	1	1
Eastern Screech-Owl	—	—	8	—	—	—	4	—	—	1	2	—	1	7
Great Horned Owl	—	—	4	6	4	—	2	2	—	—	16	—	—	4
Barred Owl	1	3	10	1	—	1	16	1	2	—	3	—	—	—
Common Nighthawk	—	3	8	5	27	3	26	5	1	—	—	2	—	8
Chuck-will's-widow	—	1	18	7	2	3	10	3	—	—	15	7	—	3
Whip-poor-will	—	5	14	2	2	4	4	1	—	—	—	1	—	5
Chimney Swift	41	78	65	104	117	85	202	56	130	51	200	102	49	126
Ruby-thr. Hummingbird	11	4	7	3	9	4	5	6	2	2	7	3	—	8
Belted Kingfisher	2	3	8	2	6	3	9	7	5	9	11	2	9	10
Red-headed Woodpecker	21	4	22	2	1	2	2	1	2	—	—	3	—	—
Red-bellied Woodpecker	47	29	38	19	16	12	14	13	15	14	77	40	19	15
Yel-bellied Sapsucker	—	—	—	1	—	—	2	—	—	—	—	1	2	—
Downy Woodpecker	19	9	43	11	12	7	8	10	11	8	36	28	15	24
Hairy Woodpecker	5	—	8	3	5	2	5	2	1	2	3	3	2	1
Red-cockaded Woodpecker	—	—	—	—	—	—	—	—	1	—	—	—	—	—
Northern Flicker	6	11	5	15	19	1	7	24	3	11	37	28	17	28
Pileated Woodpecker	16	7	13	1	2	1	2	5	6	8	24	30	9	17
Olive-sided Flycatcher	—	—	—	—	—	—	—	—	—	—	—	—	—	1*
Eastern Wood-Pewee	24	10	9	1	15	2	28	7	3	10	6	3	—	1
Acadian Flycatcher	31	13	11	1	—	—	—	—	4	6	3	—	—	9
Least Flycatcher	—	—	—	—	—	1	8	—	—	—	—	—	—	—
Eastern Phoebe	3	13	28	3	3	9	22	3	4	5	45	12	14	24
Great Crested Flycatcher	24	12	9	23	28	5	9	9	1	9	27	29	—	8
Eastern Kingbird	5	11	24	40	96	39	31	42	1	14	25	42	—	29
Horned Lark	56	—	6	—	—	—	—	—	—	—	—	5	—	—
Purple Martin	30	29	30	112	107	34	60	151	6	36	42	51	137	195
Tree Swallow	5	—	12	2	—	—	1	5	4	2	8	10	6	18
N. Rough-wng. Swallow	159	9	56	8	37	10	17	15	35	21	30	25	39	115
Bank Swallow	—	—	—	1	—	—	6	—	8	—	2	—	—	6
Cliff Swallow	—	265	—	—	—	—	—	—	127	12	—	—	—	36
Barn Swallow	73	22	29	137	170	95	79	63	90	17	78	126	84	120
Blue Jay	26	58	29	89	72	65	68	51	28	23	239	112	112	112
American Crow	5	29	39	70	90	54	44	59	37	30	165	121	161	166
Fish Crow	7	—	—	—	—	—	—	—	—	—	—	—	—	—
Common Raven	—	—	—	—	—	—	—	—	—	—	—	—	—	4
Carolina Chickadee	45	29	39	65	41	24	7	23	26	25	141	50	72	59
Tufted Titmouse	63	42	41	39	29	27	15	32	17	13	102	62	66	80
Red-breasted Nuthatch	—	—	—	—	—	—	—	—	—	—	—	—	4	—
White-breasted Nuthatch	3	4	7	—	—	—	9	10	1	15	18	3	—	8
Brown-headed Nuthatch	—	—	—	—	—	—	—	—	2	1	—	—	—	—
Carolina Wren	84	36	43	15	12	11	15	18	14	26	168	41	29	72
Bewick's Wren	—	—	2	2	1	—	5	—	—	—	—	—	—	—
House Wren	1	6	—	14	14	—	6	—	2	—	9	23	5	16
Sedge Wren	1	—	—	—	—	—	—	—	1	—	—	—	—	—
Marsh Wren	2	—	—	—	—	—	—	—	1	2	—	—	—	—
Golden-crowned Kinglet	—	—	—	—	—	—	—	—	—	—	—	—	2	—
Ruby-crowned Kinglet	3	—	5	—	1	—	1	1	—	—	28	2	—	2
Blue-gray Gnatcatcher	55	16	89	—	8	10	6	25	33	30	86	27	1	43
Eastern Bluebird	3	40	67	58	82	79	185	64	26	17	82	61	58	43
Veery	13	2	2	—	—	—	1	11	—	—	1	—	—	2
Gray-cheeked Thrush	—	1	1	—	—	—	1	—	1	—	6	—	—	—
Swainson's Thrush	42	5	5	—	4	—	7	2	2	2	67	—	—	2
Hermit Thrush	—	—	—	—	—	—	1	—	—	—	2	—	—	—
Wood Thrush	28	12	18	3	—	—	8	4	3	12	75	5	—	34
American Robin	43	101	214	167	258	79	86	250	29	74	386	242	166	546
Gray Catbird	15	10	15	5	23	3	7	4	11	2	19	9	1	17

TABLE 1. 1989 Spring Counts, Continued

	Memp	Mon8	Colu	Murf	Murf8	Leba	Leb8	High	Chat	Cha8	Knox	Gree	Gre8	Eliz
Northern Mockingbird	23	34	43	157	185	104	42	59	12	14	122	72	27	66
Brown Thrasher	8	14	20	31	35	38	21	31	5	8	52	43	25	19
Water Pipit	4	—	—	—	—	—	—	1	—	—	—	—	—	—
Cedar Waxwing	79	39	236	175	2	48	—	80	54	20	260	108	58	105
Loggerhead Shrike	6	2	12	8	10	15	6	7	2	—	1	4	3	1
European Starling	151	142	148	1500	1500	282	358	175	36	55	481	896	362	695
White-eyed Vireo	64	35	35	3	—	5	5	9	12	6	39	9	1	14
Solitary Vireo	—	—	1	—	—	—	1	2	—	—	1	—	1	18
Yellow-throated Vireo	9	3	8	2	6	—	2	1	7	8	7	—	—	5
Warbling Vireo	12	3	6	1	—	—	1	—	—	—	—	—	—	5
Philadelphia Vireo	—	—	—	—	—	—	2	—	1	—	—	—	—	—
Red-eyed Vireo	22	19	20	12	15	—	5	10	30	34	131	16	—	137
Blue-winged Warbler	2	1	12	—	—	—	3	1	—	—	1	—	—	—
Golden-winged Warbler	2	—	—	—	—	—	—	—	—	—	—	—	—	—
Tennessee Warbler	100	21	31	—	—	—	1	1	13	35	33	—	—	1
Orange-crowned Warbler	—	—	—	—	—	—	—	—	1	—	1	—	—	—
Nashville Warbler	3	—	7	—	—	—	—	—	1	2	7	1	—	1
Northern Parula	73	4	8	—	—	—	—	—	—	1	5	—	—	9
Yellow Warbler	2	1	35	1	14	—	6	2	1	19	15	14	1	30
Chestnut-sided Warbler	5	1	11	—	3	—	4	2	13	—	7	—	—	37
Magnolia Warbler	—	2	1	6	14	—	1	1	2	2	10	—	—	—
Cape May Warbler	—	—	2	6	—	—	2	1	9	8	20	—	—	3
Black-thr. Blue Warbler	—	—	—	—	—	—	—	—	—	—	—	—	—	17
Yellow-rumped Warbler	8	3	49	4	4	—	28	12	25	16	143	54	75	53
Black-thr. Green Warbler	7	—	14	1	3	—	2	—	9	2	23	2	—	32
Blackburnian Warbler	1	—	4	—	—	—	1	—	—	3	3	1	—	1
Yellow-throated Warbler	3	4	12	—	2	—	2	1	7	25	4	—	—	11
Pine Warbler	1	—	6	5	2	—	4	1	5	6	7	7	2	8
Prairie Warbler	1	11	29	—	3	9	8	3	—	—	5	—	—	1
Palm Warbler	—	—	37	10	15	—	4	6	7	—	6	—	—	3
Bay-breasted Warbler	2	1	3	—	3	—	—	1	4	4	7	—	—	1
Blackpoll Warbler	9	—	5	—	3	—	2	—	9	4	6	—	—	1
Cerulean Warbler	11	—	7	—	—	—	—	—	—	2	3	—	—	1
Black & White Warbler	6	—	7	4	4	—	2	1	5	2	12	1	—	25
American Redstart	17	—	14	2	3	—	—	1	6	40	7	—	—	1
Prothonotary Warbler	37	13	25	—	2	—	—	—	3	3	4	11	—	3
Worm-eating Warbler	3	1	4	—	—	—	—	—	1	3	9	—	—	7
Swainson's Warbler	3	—	—	—	—	—	1*	—	1	—	—	—	1	—
Ovenbird	14	—	4	—	2	—	3	—	2	1	21	4	—	70
Northern Waterthrush	1	—	2	—	3	—	3	—	1	1	6	—	—	2
Louisiana Waterthrush	5	4	6	2	1	—	4	2	3	2	1	2	3	7
Kentucky Warbler	37	12	17	—	3	—	2	1	7	8	13	—	—	10
Connecticut Warbler	—	—	—	—	—	—	—	1*	1	—	—	—	—	—
Mourning Warbler	—	—	—	—	—	—	—	—	1	—	—	—	—	—
Common Yellowthroat	18	24	31	1	17	25	13	23	8	10	97	24	—	13
Hooded Warbler	9	1	16	1	1	—	—	—	4	7	9	3	—	44
Wilson's Warbler	—	—	—	—	—	—	—	—	—	1	1	—	—	—
Canada Warbler	—	—	—	—	—	—	—	—	2	—	1	—	—	1
Yellow-breasted Chat	6	16	24	2	20	6	11	8	3	3	33	12	1	11
Summer Tanager	70	10	26	4	11	3	15	9	6	12	10	3	—	—
Scarlet Tanager	13	4	18	3	8	—	2	1	7	11	67	9	1	30
Northern Cardinal	112	149	94	121	182	91	87	89	57	29	275	129	163	182
Rose-breasted Grosbeak	23	2	16	—	6	—	6	1	3	4	50	5	—	20
Blue Grosbeak	3	6	—	—	6	4	2	8	3	6	8	2	—	1
Indigo Bunting	119	29	63	25	66	46	49	29	32	25	170	42	—	27
Painted Bunting	1	—	—	—	—	—	—	—	—	—	—	—	—	—
Dickcissel	96	15	9	—	6	—	—	1	—	—	—	—	—	—
Rufous-sided Towhee	9	44	32	20	33	25	24	17	29	23	80	39	21	85
Chipping Sparrow	10	11	17	29	22	16	7	23	31	19	46	21	36	43
Field Sparrow	2	9	30	24	22	50	48	19	16	7	80	19	26	14

TABLE 1. 1989 Spring Counts, Continued

	Memp	Mon8	Colu	Murf	Murf8	Leba	Leb8	High	Chat	Cha8	Knox	Gree	Gre8	Eliz
Vesper Sparrow	—	—	—	—	—	—	1	—	—	—	—	—	—	—
Lark Sparrow	—	—	—	—	—	4	—	—	—	—	—	—	—	—
Savannah Sparrow	2	—	6	—	—	—	—	2	5	—	10	3	—	5
Grasshopper Sparrow	3	—	—	—	1	—	2	1	5	15	9	8	—	6
Fox Sparrow	—	—	—	2	—	—	—	—	—	—	—	—	—	—
Song Sparrow	4	—	2	6	10	—	4	13	21	17	138	42	49	170
Lincoln's Sparrow	3	—	1	—	—	—	—	—	—	—	—	—	—	—
Swamp Sparrow	9	—	19	—	—	—	16	2	—	—	1	1	1	3
White-throated Sparrow	33	14	59	2	22	3	4	11	27	5	122	46	29	22
White-crowned Sparrow	19	1	6	5	5	—	—	1	3	—	4	28	23	32
Dark-eyed Junco	2	—	—	—	—	—	1	—	1	—	—	—	1	33
Bobolink	8	2	14	—	12	—	—	100	6	15	—	—	—	3
Red-winged Blackbird	192	98	130	561	2500	85	97	102	68	46	174	110	156	136
Eastern Meadowlark	40	67	75	138	113	105	104	71	6	31	66	236	147	92
Rusty Blackbird	1	—	—	—	—	—	1	—	—	—	—	3	17	—
Common Grackle	119	81	184	5000	3000	124	161	177	17	72	251	447	314	512
Brown-headed Cowbird	86	34	42	78	50	42	45	—	13	9	97	84	89	47
Orchard Oriole	12	10	42	78	50	42	45	—	4	7	8	15	—	16
Northern Oriole	32	1	6	—	4	2	2	1	1	1	8	2	—	17
Purple Finch	—	—	—	3	—	—	1	6	—	—	—	2	36	3
House Finch	—	7	28	23	24	—	1	23	3	5	44	44	15	31
Pine Siskin	—	6	—	—	—	—	3	2	—	34	—	—	235	—
American Goldfinch	17	67	94	88	43	58	28	94	46	35	91	99	107	270
Evening Grosbeak	—	—	—	—	—	—	—	—	—	—	—	—	128	—
House Sparrow	17	84	25	186	2000	28	75	70	4	17	59	63	37	78
Total Species	147	105	138	99	107	72	135	123	141	115	127	105	84	136

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SECOND RECORD OF RUFF IN TENNESSEE

MARTHA WALDRON
1626 Yorkshire Drive
Memphis, TN 38119

On 21 August 1988 Virginia Reynolds and I observed a female Ruff (*Philomachus pugnax*) in southwestern Shelby Co., Tennessee. The bird was at the T.J. Maxon Sewage Lagoons approximately 0.8 km south of the TVA Allen Steam Plant. The Ruff was observed for 30–40 minutes as it foraged among Killdeer (*Charadrius vociferus*), Pectoral Sandpipers (*Calidris melanotos*), and Least Sandpipers (*Calidris minutilla*). We viewed the Ruff with binoculars and variable power spotting scopes from different aspects as she turned and walked back and forth 60–80 m from us. Viewing conditions were good in the bright afternoon sunlight.

The Ruff was taller than a nearby Pectoral Sandpiper; she had a "pot-belly" and did not have the streamlined look of a sandpiper. Her back was scaly with a definite outline to the feathers. Her breast was black with splotches; this color pattern extended from her neck to the white abdomen. The side of the head was rufous to buff, and the crown was rufous with a hint of an eyeline. The bill was entirely black. The leg color was fleshy to lemon yellow, not the bright yellow of the Pectoral Sandpiper or the flesh color of the Killdeer. When the Ruff dropped one wing while preening a white band was visible on the rump. The first Ruff reported from Tennessee was in East Tennessee in 1972 (*Migrant* 43:86, 1972); this is the second record of a Ruff to be accepted by the TOS Records Committee.

Accepted 16 February 1989.

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MINUTES OF THE 1989 TOS BOARD OF DIRECTORS MEETING

The 1989 Spring Meeting of the TOS, consisting of many interesting field trips, a board of directors meeting, and a banquet Saturday evening, was headquartered at the Ramada Inn South in Chattanooga, Tennessee on May 5–7, 1989.

BOARD OF DIRECTORS MEETING

The meeting was called to order by President Dan Gray on May 6 at 3:10 P.M. It was determined a quorum was present with 32 directors in attendance. Copies of the minutes of the November 1988 meeting were distributed and approved as printed.

There were no reports from the Vice Presidents for East and West Tennessee. There were no reports from the DIRECTORS AT LARGE.

TREASURER George Payne reported that during the period from November 15, 1988 through May 1, 1989, income was $11,951.79 and expenses were $11,048.65. Current assets are $51,770.93. Anticipated liabilities through this year's budget are $12,450.00 leaving a capital reserve of $39,320.93.

George reported we are down 483 memberships from last year at this time because dues envelopes have not yet been distributed. He expects this will be rectified soon — the dues envelopes have been printed and are now ready for distribution. A detailed treasurer's report was submitted and approved as printed.

CONSERVATION AND EDUCATION chairperson Ken Dubke presented a resolution supporting the passage of Morris Udall's bill to establish the American Heritage Trust Act of 1989. A motion to support this resolution was made, seconded and carried. The TOS Board of Directors recommended supporting this resolution. A complete copy is filed with the secretary.

TENNESSEE ENVIRONMENTAL COUNCIL chairperson Ken Dubke made a motion that we continue our membership in the Council indefinitely. The motion was seconded and carried.

CURATOR James Tanner reported that income from sales of back copies of *The Migrant* during the last 12 months was $14.00. Copies of all issues are available.

EDITOR of *The Migrant*, David Pitts, reported that Glen Eller has resigned as compiler of the season report for the Eastern Mountain Region. His replacement will be Richard Lewis of Bristol. John Robinson has resigned as Season Editor and a replacement is needed.

A three-year species index is prepared for the December 1989 issue; all of that issue except the index has been typeset.

A membership list will be published with one of the 1989 issues if possible.

Manuscripts are usually published in chronological order. Occasional exceptions may be made. Short notes may be published prior to longer manuscripts due to space restrictions.

The matter of cover colors has not been resolved with Allen Press. Bids from other printers are being considered.

David asked for help from TOS members to point out errors, suggest changes, and submit manuscripts.

The process of publication is continually being updated in an attempt to keep the dates of issuance more regular.

NOMINATING COMMITTEE chairperson Ron Hoff presented the proposed 1989 slate of officers:

President		Barbara Finney, Knoxville
Vice President (East)		J.B. Owen, Knoxville
Vice President (Middle)		Portia MacMillan, Nashville
Vice President (West)		Virginia Reynolds, Memphis
Directors at Large	(East)	Dee Eiklor, Gray
	(Middle)	Dr. David Snyder, Austin Peay
	(West)	John R. Conder, TWRA
Treasurer		George Payne, Memphis
Secretary		Nancy Tanner, Knoxville
Curator		Dr. James Tanner, Knoxville
Editor		Dr. David Pitts, Martin

It was moved that nominations be accepted by acclamation. Motion was seconded and carried.

FINANCE COMMITTEE chairperson Richard Taylor was absent so President Gray read a report from him stating that all deposits and checks written against TOS for April 1988 to April 1989 have been approved. He asked that all state treasurers check the computer roster received from George Payne against their own mailing list and make necessary corrections.

President Dan Gray read a personal letter from Richard that he is retiring and moving to Texas. That will necessitate finding a new finance committee chairman. The report and the letter are filed with the secretary.

BREEDING BIRD ATLAS PROJECT chairman Charles Nicholson reported that the Atlas is now into the 4th year of this 5-year project. We have finished about 1/3 of the targeted blocks. Some people will be working full time this summer; but over the years there has been a steady decrease in workers — from 200 down to 120. Participation is also encouraged in ways other than field work — financial assistance and keeping lists of birds in your own yard, etc.

There are two forays this year. The first is May 26–29 in Fayetteville, Lincoln County, and the second June 23–25 in Jackson, Tennessee. Forays are an excellent way to learn how to Atlas.

The Atlas will be hiring people this summer to do 14 blocks each — paying them $100 a block and expecting them to spend 3 days in each. Chuck welcomes block sponsorships by individuals or chapters. Negotiations are under way with UT Press to publish the Atlas.

In the 1990 session of the state legislature, we will be asking for funding of the publication through the TWRA. We will also ask for another appropriation in 1991. Plans are being made for a possible state-wide BIRD-A-THON in the spring of 1990.

TENNESSEE BIRD RECORDS OR CERTIFICATION COMMITTEE chairperson Rick Knight — The bird photo file proposed at the fall meeting is in the works. Portia MacMillan will be the curator of this file, which will be located in the Nashville area. It will have a duplicate file system. The bird photo file will be available for documentation and research, but it will not be circulated for programs. Recent photos should be submitted to your regional compiler. Older photos should be sent to the Bird Records Committee or Rick Knight. Common bird and rare bird photos are needed.

PATCHES AND DECALS chairperson was absent and no report was submitted. We believe that this chairperson is moving out of state.

RARE BIRD ALERT chairperson David Chaffin reported a general lack of interest in establishing a hot line at this time (as per results from a poll conducted by the committee). They recommend we utilize Mike Bierely's existing bird alert number: 1-800-444-BIRD.

FALL SYMPOSIUM — chairperson of the papers, David Snyder, was absent and there was no report. George Mayfield is handling the accommodations for this event. He reported that the Fall Meeting will be held October 13–15, 1989 at the Ramada Inn located on I-40 at Highway 127 in Crossville. All who wish to attend should make advance reservations.

EDITOR of "Tennessee Warbler", Ann Hettish, has resigned. She was recognized for her excellent efforts and achievements.

MEMBERSHIP COMMITTEE chairperson Audrey Hoff reported that last fall, $150.00 was appropriated to print new membership flyers which include current dues. With that money ($132.25) 1,150 flyers were printed. They are available for each chapter.

OLD BUSINESS:

President Gray presented a letter from James Mason of Knoxville objecting to the funding of John Robinson's book, BIRDS OF TENNESSEE. His objections were noted and a copy of the letter was filed with the secretary.

NEW BUSINESS:

President Gray read a letter from the Memphis chapter stating they would like Nashville to host the spring meting in the hope that attendance might be improved for the 75th anniversary meeting of TOS. Nashville will consider this and respond at a later date.

Lil Dubke moved to adjourn. The meeting was dismissed at 5:15 P.M.

Respectfully submitted,

Cleo Mayfield, Secretary TOS

TOS ANNUAL MEMBERSHIP MEETING

The seventy-fourth annual meeting of the TOS was called to order by President Dan Gray at 7:00 P.M. on May 6, 1989 at the Ramada Inn South, Chattanooga, Tennessee.

John Henderson, president of the host chapter, Chattanooga, introduced the head table. Special guests introduced were: Dixon Merritt's (a founder of TOS) daughter Alice Merritt Gant, and his granddaughter, Alice Gant Watkins.

President Dan Gray conducted a chapter roll call. There were 107 present from 12 of our chapters. A report of the board of directors meeting followed.

TREASURER George Payne recapitulated his report as given at the Board of Directors meeting. A copy was filed with the secretary.

BREEDING BIRD ATLAS project chairperson Charles Nicholson also repeated his report.

CONSERVATION/EDUCATION CHAIRMAN Ken Dubke presented a resolution approved by the Board of Directors supporting the passage of the American Heritage Trust Act of 1989. This was affirmed by the membership. A copy of the resolution is filed with the secretary.

NOMINATING COMMITTEE chairperson Ron Hoff presented the following slate of officers for 1989–90 which was previously approved by the Board of Directors:

President		Barbara Finney, Knoxville
Vice President (East)		J.B. Owen, Knoxville
Vice President (Middle)		Portia MacMillan, Nashville
Vice President (West)		Virginia Reynolds, Memphis
Directors at Large	(East)	Dee Eiklor, Gray
	(Middle)	Dr. David Snyder, Austin Peay
	(West)	John R. Conder, TWRA
Treasurer		George Payne, Memphis
Secretary		Nancy Tanner, Knoxville
Curator		Dr. James Tanner, Knoxville
Editor		Dr. David Pitts, Martin

Helen Dinkelspiel moved to accept the slate by acclamation. Motion was seconded and carried unanimously.

President Dan Gray turned the gavel over to the new president, Barbara Finney. Barbara thanked Dan for his loyal service and for stepping in during a difficult time.

John Henderson returned to the podium and thanked all those responsible for putting together such a successful meeting. He then introduced the speaker for the evening, Dr. Richard P. Urbanek. Dr. Urbanek — a research associate in Ohio State University's Cooperative Fish and Wildlife Research Unit — presented a slide show and lecture entitled "A Study of Migratory Sandhill Cranes in Eastern America: Implications to Recovery of the Whooping Crane."

Respectfully submitted

Cleo Mayfield, Secretary.

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WILSON'S PLOVER SIGHTING IN SHELBY COUNTY, TENNESSEE

Martha Waldron
1626 Yorkshire Drive
Memphis, TN 38119

On 17 April 1988 Michael Hughes, Virginia Reynolds, and I simultaneously observed a Wilson's Plover (*Charadrius wilsonia*) at the T.J. Maxson Sewage Lagoons in southwest Shelby County, Tennessee, approximately 0.8 km south of the TVA Allen Steam Plant. The bird was observed for approximately 25 minutes feeding among Killdeer (*Charadrius vociferus*), Pectoral Sandpipers (*Calidris melanotos*), Solitary Sandpipers (*Tringa solitaria*), and Lesser Yellowlegs (*Tringa favipes*). The Wilson's Plover was viewed from different aspects as it turned and walked back and forth approximately 40 m from us. It was observed with a Bushnell 20–60x spotting scope, a Swarvorsk 25–75x spotting scope, Swift Audubon 8x40 binoculars, and Bausch and Lomb Elite 8x42 binoculars in above average conditions in bright afternoon sunlight. The male plover was in adult breeding plumage. Its back was a light buff that partially extended up the back of the neck to the white hind-neck collar. From the side its white forehead could be seen as well as the wide back collar starting at the side of the neck and continuing across the breast. A blackish gray stripe was observed from the back of the head continuing forward below the eyes. It had a large heavy bill and its legs showed a pinkish gray color, almost flesh-toned. It was smaller than the Killdeer which was feeding within two meters.

This is the first sighting of a Wilson's Plover in west Tennessee. There have been two other sightings in the state, both near Chattanooga (*Migrant* 32:44, and *Migrant* 43:62). The first was on 22 September 1957, and the second was on 26 June 1961. Apparently the west Tennessee plover did not stay after we observed it as repeated trips to the lagoons failed to produce the bird.

Accepted 20 July 1988.

The Migrant, 60(2):57, 1989

BOOK REVIEW

ATLAS OF WINTERING NORTH AMERICAN BIRDS: An Analysis of Christmas Bird Count Data, by Terry Root. 1988. 336 p. Paperbound $35.00, clothbound $60.00. University of Chicago Press, Chicago.

The primary feature of this book is a series of maps showing the relative abundance in winter of many North American birds. The data were obtained from Christmas Bird Counts made in the decade 1962/63 through 1971/72. The number of individuals of each species per party hour at each location was converted to a relative number which was then plotted on a map of the 48 states and southern Canada. Two types of maps are presented. In one the relative abundance is shown like contours on a topographic map, and in the other the abundance is indicated by a diagram appearing as if the reader were viewing mountains and valleys from high above the earth. I found the first type easier to use. The maps for each of 250 species are accompanied by comments on the apparent causes of the winter distribution and a description of the wintertime behavior.

An introduction describes the history of Christmas Bird Counts and explains the methods used in preparing the maps. Additional maps in this section display information on winter climates, vegetation types, and other factors affecting bird distribution. Some of these maps are supplied also on transparent overlays which fit over the species distribution maps. Also on transparent overlays are outlines of the states and provinces and lines of latitude and longitude. One appendix supplies more information on each species, and a second contains 96 maps for additional species whose data were difficult to interpret.

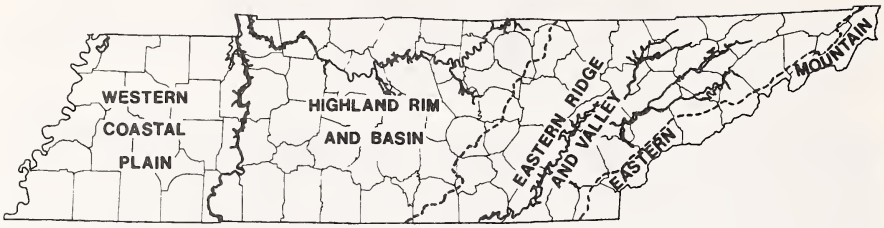
The foreword states "the present publication is...an important research tool," so it is worth making some comments related to this. One shortcoming of the maps is that the method of smoothing the data resulted in a spreading-out of the range limits. This is pronounced in the maps for oceanic or salt water species — such as the Brown Pelican and Clapper Rail — where the normal range ends abruptly at the edge of salt water; the maps often show the range extending many miles inland. Using the overlay showing state boundaries, I compared the relative abundance and distribution as shown on the maps of several species with the results of my analysis of Christmas Bird Counts in Tennessee (Migrant 56: 85–97. 1985). For most species there was good agreement. One map, that for the Black-capped Chickadee, appears to be grossly in error. Three species (Virginia Rail, Brown-headed Nuthatch, and Prairie Warbler) were shown to be present in areas where they are absent in winter or extremely rare. And on the contrary, about 10 species were shown to be absent from parts of this state where they have been regularly reported on Christmas Bird Counts.

Since this report is a pioneering effort, it is not surprising that there should be difficulties in converting the raw data from Christmas Counts to maps of relative abundance. I think that, despite the above criticisms, the author and publisher have succeeded in producing a picture of the relative abundance of many wintering North American birds and have done this in such a way that the book can be used for future research. — JAMES T. TANNER, 417 Switzerland Dr., Knoxville, TN 37920.

The Migrant, 60(2):58–66, 1989

THE SEASON

John C. Robinson, Editor



WINTER: 1 DECEMBER 1988 – 28 FEBRUARY 1989

Rainfall was perhaps the major weather event of this winter season, with periods of heavy rain causing moderate to severe flooding in parts of middle and west Tennessee. Despite the rain and the expected periods of below freezing temperatures, many observers took to the field and some important discoveries were made.

The absence of winter finches and most other irruptive species was noted statewide; however, Rough-legged Hawks were reported in moderate numbers in middle Tennessee and at least one was seen in west Tennessee. Impressive counts of waterfowl were made, especially in Henry County and at the Hiwassee River Area. Large roosts of American Robins and American Crows were also documented. Yet another Ross' Goose was found, this one in Lawrence County. One Glaucous Gull and two sightings of Great Black-backed Gulls were indicative of a good Larid winter. Most astounding, however, were the 7 *Selasphorus* hummingbirds reported in east, middle and west Tennessee; no less than 4 of these birds were safely identified as Rufous Hummingbirds.

The *Migrant* welcomes Richard P. Lewis as the new compiler for the Eastern Mountain Region. In the future, all noteworthy observations in that region should be promptly sent to him at the end of each reporting season. Readers of this report should note that many areas of the Eastern Mountain Region are not sufficiently represented in these pages — a situation that can be corrected by the submission of more observations from the central and southern parts of that region. In fact, observers across the state may find it challenging and rewarding to explore and report on areas that have only infrequently been visited by birders. — John C. Robinson

The following abbreviations are used in the text: ad = adult; EOP = end of period; ers = earliest reported sighting; im = immature; max = maximum 1-day count during period; m. ob. = many observers; NWR = National Wildlife Refuge; ph = photographs; CBC = Christmas Bird Count; S.P. = State Park; yg = young; * = documented record; ** = specimen record.

WESTERN COASTAL PLAIN REGION — Climatic conditions were wetter than usual but temperatures remained within their normal ranges. Accipiters were observed in greater numbers than in the last few years, with many sightings in suburban backyards and city parks. Short-eared Owls were reported in scattered locations throughout the region. Reports of the elusive American Tree Sparrow reaffirmed the presence of the winter season. Some species of sparrows, particularly the Field Sparrows and White-throated Sparrows, appeared to be less abundant than in previous years.

Table 1. 1989 Mid-Winter Eagle Counts (5–19 January 1989)

Compiled by Bill Yambert
Tennessee Wildlife Resources Agency
6032 West Andrew Johnson Highway
Talbott, TN 37877

	Adults	Immatures	Unknown	Total
Mississippi River Area				
Reelfoot Lake	52	51	—	103
Open Lake	2	—	—	2
Big Cypress Natural area	1	—	—	1
	55	51	—	106
Kentucky Lake Area				
LBL (Barkley Portion)	2	2	—	4
(Kentucky Lake Portion)	8	10	—	18
Kentucky Lake	42 + 4*	22 + 1*	—	64 + 5*
Barkley	—	1*	—	1*
Pickwick Lake	5	3	—	8
	57 + 4*	37 + 2*	—	94 + 6*
Middle TN				
Cross Creeks	5	—	—	5
Cheatham	1	—	—	1
Center Hill	1	—	—	1
Normandy	1	—	—	1
Tims Ford	1 + 1*	—	—	1 + 1*
Woods Reservoir	2	—	—	2
Woodbury	1*	—	—	1*
Tansai Lake	1	—	—	1
Dale Hollow	27	20	2	49
	39 + 2*	20	2	61 + 2*
East TN				
Cherokee	0	2	—	2
Douglas	1	—	—	1
Norris	2	—	—	2
French Broad River	2	—	—	2
Fort Loudoun Reservoir	1	—	—	1
Tellico Reservoir	2	3	—	5
Watts Bar	21	1	—	22
Chickamauga Lake	6 + 1*	1	—	7 + 1*
Nickajack Lake	1	—	—	1
Melton Hill Lake	1	—	—	1
	37 + 1*	7	—	44 + 1*
Statewide Total	188 + 7*	115 + 2*	2	305 + 9*

**Golden Eagles*

Loon-Falcon: Common Loon: 19 Jan (1) PLS (AHH, EJW); 19 Feb (38) PLS, BSU (DWB), max. Pied-billed Grebe: 19 Feb (51) BSU (DWB), max. Horned Grebe: 4 Jan (145) PLS, BSU (DWB). Double-crested Cormorant: 4 Jan (1) PLS, 19 Feb (1) BSU (DWB). Great Blue Heron: 19 Feb (42) PLS (DWB), max. Great Egret: 7 Dec (1) ESL (LCC, HBD, NMS, BHW). Cattle Egret: 24 Dec (1) Savannah CBC (Regina D. Rogers). Greater White-fronted Goose: 19 Feb (13 ad, 5 im) BRF (DWB). Snow Goose: 18 Feb (179 blue, 56 white) BRF (DWB). Gadwall: 4 Jan (135) BRF (DWB). American Wigeon: 4 Jan (377) BRF (DWB), max. Canvasback: 4 Jan (450), 12 Feb (1,627) BRF (DWB), max. Redhead: 12 Feb (442) BRF (DWB), max. Ring-necked Duck: 19 Feb (2,000) BRF, PLS (DWB), max. Lesser Scaup: 19 Feb (1,650) BSU, PLS (DWB). Common Goldeneye: 19 Feb (1,180) BSU, PLS (DWB), max. Bufflehead: 19 Feb (410) PLS, BSU (DWB), max. Common Merganser: 4 Jan-18 Feb (1-7) PLS, 19 Feb (5) BSU (DWB). Red-breasted Merganser: 19 Feb (74) PAP (DWB). Ruddy Duck: 4 Jan-12 Feb (580-1,210) BRF, PLS (DWB); 28 Jan (3,000+) REL, LKC (RLI, VLI); 26 Feb (5,000+) REL, Obion Co. (MLG). Black Vulture: 4 Jan (1) NE SBC (JMJ), uncommon in SBC. Turkey Vulture: 4 Jan (1) NE SBC (JMJ), uncommon in SBC. Bald Eagle: 4 Jan (1 ad) NE SBC (JMJ), rare in SBC. Sharp-shinned Hawk: 3 Dec (1) Kennedy Park, SBC (MTOS); 4 Dec (1) PEF (JRW); 9 Dec (2) MEM (MGW, Ray N. Wilson); 14 Dec (1) SFP (HBD, SLL, NMS, VBR); 18 Dec (7) MEM CBC (MTOS); 8 Jan (1) ELS (JRW); 20 Jan (1) MEM (CHB); 28 Jan (1) REL (RLI, VLI). Cooper's Hawk: 1, 4 Dec (1) PEF (JRW); 2 Dec (1) Coffey Grounds, MEM (Ben B. Coffey, Jr.); 12 Dec (1) MEM (CHB); 18 Dec (2) MEM CBC (MTOS); 1-30 Dec (1) Iris Hill, NE SBC (JAF); 5, 7, 10 Jan (1) MEM (JRW). NORTHERN GOSHAWK: 9, 20 Jan (1) MEM (fide Dave Vance, MGW). Rough-legged Hawk: 27 Dec (1) PEF (DJS, Steve and Rebecca Satterfield). Golden Eagle: 18 Feb (1 ad) BRF (DWB); 26 Feb (1 im) REL, LKC (MLG). American Kestrel: 29 Jan (32) LKC (RLI, VLI). Merlin: 14 Dec (1) SFP (HBD, SLL, NMS, VBR); 2 Jan (2) ESL (Martha Ramey); 19 Jan (1) SW SBC (Gil B. Beaver); 26 Jan (1) MEM (MGW); 5 Feb (1) SW SBC (JRW). Peregrine Falcon: 1 Dec-EOP (1) MEM (m. ob.).

Crane-Lark: SANDHILL CRANE: 19 Dec (1) PEF (EJR), rare for this area and time of year. Spotted Sandpiper: 9-11 Feb (1) ESL (JRW, RTC). American Woodcock: 27 Jan-EOP (4) Iris Hill, NE SBC (JAF, Sue C. Ferguson). Franklin's Gull: 3 Dec (1) McKellar Lake (JRW, Joe B. Guinn, DJS, Dollyann Daily); 9, 10, 12 Feb (1) McKellar Lake (JRW). Bonaparte's Gull: 4 Jan (219) PLS, BSU (DWB), max; 8 Jan (2), 4 Feb (120+), 9 Feb (144) McKellar Lake (JRW); 9 Feb (60+) ESL (VBR, MGW). Ring-billed Gull: 7 Dec (247) ESL (HBD, LCC, NMS, BHW); 8 Jan (1,200+), 4 Feb (500+), 9 Feb (720+) McKellar Lake (JRW); 9 Feb (150+) ESL (VBR, MGW). Herring Gull: 8 Jan (9), 4 Feb (3), 9 Feb (5) McKellar Lake (JRW); 9 Feb (1) ESL (VBR, MGW). GREAT BLACK-BACKED GULL: 15 Dec (1, 1st year plumage) PAP (DJS). Short-eared Owl: 3-26 Dec (4) ESL (JRW, DJS, m. ob.); 6-11 Dec (1) Bartlett, SBC (JRW); 23 Dec-EOP (9) Savannah Bottoms, HDC (DJS); 23 Dec (1) Savannah airport, HDC (JTP); 19 Feb (1) BRF (DWB). RUFOUS HUMMINGBIRD: 8 Dec-7 Feb (1 female) Germantown, NE SBC (*Dorinda Hanna, m. ob.); the bird was photographed, measured, shipped to San Diego and released. Horned Lark: 4 Feb (500/400) PEF/ESL (JRW).

Wren-Blackbird: Sedge Wren: 10 Feb (1) PEF (RTC). White-eyed Vireo: 25 Dec, 8 Jan (1) ESL (*JRW). Indigo Bunting: 19 Dec (1) PEF (EJR). American Tree Sparrow: 19 Jan (1) BRF (AHH, EJW); 28 Jan (7) LKC (RLI, VLI); 18 Feb (5) BRF (DWB); 26 Feb (33) REL, Airpark area (MLG). Field Sparrow: 18 Dec-EOP — numbers on CBC and field observations were exceptionally low. Vesper Sparrow: 23, 30 Dec, 28 Jan (2, 1, 1) Savannah Bottoms, HDC (DJS, CAS, Ann Tarbell); 22 Jan (1) PEF (VBR); 4 Feb (13) PEF (JRW); 19 Feb (1) BSU (DWB). Le Conte's Sparrow: 6 Dec (1) Bartlett, SBC (JRW); 23 Dec-EOP (up to 10) Savannah Bottoms, HDC (DJS); 19 Jan (1) BRF (AHH, EJW); 19 Feb (1) BRF (DWB). Lincoln's Sparrow: 31 Jan (1) PEF (VBR, MGW). Lapland Longspur: 4 Feb (5/13) ESL/PEF (JRW). SMITH'S LONGSPUR: 3 Dec-EOP (1-13) PEF (Marvin Davis, JRW, m. ob.) [details should be published-ed.]. Western Meadowlark: 1 Dec-11 Feb (1) PEF (JRW, m. ob.); 26 Feb (1) REL, Obion Co. (MLG). Brewer's Blackbird: 20 Dec (5 males) Savannah Bottoms, HDC (DJS); 21 Feb (1) MEM (W. Robert Peeples).

Locations: BRF — Britton Ford, Tennessee NWR, Henry Co.; BSU — Big Sandy Unit, Tennessee NWR, Henry Co.; ESL — Ensley sewage lagoons, Shelby Co.; HDC — Hardin Co.; LKC — Lake Co.; MEM — Memphis; PAP — Pace Point, Tennessee NWR, Henry Co.; PEF — Penal Farm, Shelby Co.; PLS — Paris Landing S.P., Henry Co.; REL — Reelfoot Lake, Obion and Lake Cos.; SBC — Shelby Co.; SFP — Shelby Forest S.P., Shelby Co.;

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HIGHLAND RIM AND BASIN REGION — Weather during the period was mild and there were no extended periods of sub-freezing temperatures; nor were there any heavy, lasting snows. Perhaps the most notable weather occurrences were two periods of heavy rain in February that caused wide-spread flooding.

The scarcity of irruptive species (e.g., Pine Siskin, Evening Grosbeak, Red-breasted Nuthatch and Purple Finch) was striking. These species were reported from only a few locations and primarily in low numbers. Many observers remarked on the low number of all bird species at feeders this winter. This lack of activity at feeders can, in part, be attributed to the outstanding wild food crop we experienced this year. The hackberry crop was especially impressive and probably accounts for the large numbers of American Robins and Cedar Waxwings present throughout the period.

Among the rarities recorded during the period were a Red-throated Loon and a Merlin at Percy Priest Lake, a Glaucous Gull in first winter plumage at Woods Reservoir, and unusually high numbers of Short-eared Owls and Rough-legged Hawks. In addition, a Rufous Hummingbird was discovered, perched on a wire in a yard in Nashville where it was believed to be torpid but was later determined to be dead and was collected. Over 400 Sandhill Cranes were reported in the region.

Loon-Hawk: RED-THROATED LOON: 25 Feb-EOP (1, ph) Percy Priest Lake, Anderson Rd. Recreation Area, DVC (Daniel R. Jacobson), first DVC record. Double-crested Cormorant: 28 Jan (10) AEDC Retention Pond, FKC (RWL, DD), max. Tundra Swan: 20 Feb-EOP (2) CCNWR (DWB), only report. Greater White-fronted Goose: 5 reports for region; 26 Dec/1 Jan (2/7) Blackman Rd., RUC (RVM, TJW, ALH/TJW), ers; 8 Jan (2, ph) Robertson Pond, LWC (DJS); Jan-Feb

(4, seen "often") AEDC Retention Pond, FKC (DD). Snow Goose: 1 Jan-EOP (up to 13 birds, including 2 "snows" on 17 Jan and 13 "blues" on 13 Feb) Robertson Pond, LWC (DJS, m. ob.); 26 Dec (1 blue) Blackman Rd., RUC (ALH, RVM); 20 Feb (100+) CCNWR (DWB), max. ROSS' GOOSE: 8-11 Jan (1, ph) Robertson Pond, LWC (DJS, Michael A. Beuerlein, m. ob.), 4th state record and 1st for LWC. Northern Shoveler: 25 Feb (20) BWMA, SWC (DWB), max. Canvasback: 4 Feb (65) CCNWR (DWB), max. Redhead: 10 Feb (50) Monsanto Ponds, MUC (O. Bedford Lochridge), max. Ring-necked Duck: 25 Feb (1,405) CCNWR and BWMA, SWC (DWB), max. Hooded Merganser: 19 Dec (200) Couchville Lake, Long Hunter S.P., DVC (MLM), max. Black Vulture: 10 Jan (46) 3.2 km W of Byrdstown, PIC (RCH), unusually high number for PIC in winter. Bald Eagle: 11 Dec-28 Jan (1 ad, 1 im) Woods Reservoir area, FKC (RWL, DD); 23 Dec-11 Feb (1-2) Normandy Lake, CFC (Frank Hernandez); a pair was observed carrying sticks to nest at the latter site on 28 Jan and 11 Feb. Rough-legged Hawk: 3 Dec (1, light phase) Big Rock, SWC (DWB), ers; 15-16 Dec (2, light phase) FCMR, SWC (DWB); 26 Dec (1) Sowell Hollow Rd., MUC (Mark H. Mayfield, George R. Mayfield, Jr.); 1 Jan (1) near Monsanto Ponds, MUC (William N. Jernigan); 2 Feb (1, dark phase) Metro Center, DVC (DFV); 15 Jan (1, dark phase) FCMR (DWB); 12 Feb (1, dark phase) LBL, SWC (DWB); 8 individuals were reported from 6 locations.

Merlin-Hummingbird: Merlin: 28 Dec (1) LWC (*DJS); 2 Jan-EOP (1, ph) Anderson Rd. Recreation Area, Percy Priest Lake, DVC (CGD, CAS, m. ob.); 1 bird also wintered at the latter site in the winters of 86-87 and 87-88. Ruffed Grouse: 1 Dec (1) Star Point Resort Community, PIC (Fran Baker); 6, 16 Dec (1) BAH (RWS), only reports. Sandhill Crane: 29 Dec-EOP (1, ph) Robertson Pond, LWC (DKS, David Ihrie, m. ob.), ers; 14 Feb (60) BAH (RWS); 15 Feb (50) Millers Crossroads, CFC (Lee W. Medley); 17 Feb (20) PIC (Faye Wells); 25 Feb (60) PIC (Jessie Baker); 19 Feb (246) PIC (RCH, Oleta Davidson, Robert Baker, Rex Zimmerman), max; 20 Feb (28) PIC (Margaret Zimmerman); 23 Feb (100+) PIC (Faye Wells); 24 Feb (44) PIC (J. David Hassler, Oleta Davidson); some duplication of cranes counted in PIC is possible. Least Sandpiper: 22 Jan (1) mouth of Gum Creek on Woods Res., FKC (RWL), only report. GLAUCOUS GULL: 7-26 Jan (1, 1st winter plumage, ph) Woods Reservoir, FKC (RWL, DD, TJW, James R. Peters, m. ob.). Common Barn-Owl: 1 Dec (1) Clarksville, MTC (DWB), only report. Short-eared Owl: 18 Jan (1) Metro Airport, DVC (M. Patricia Stallings); 26 Feb (2) Ashland City, Cheatham Co. (CGD). RUFOUS HUMMINGBIRD: 15 Dec (1) Lynnwood Blvd., Nashville, DVC (fide Michael L. Bierly), reported by a home owner on 15 Dec, the bird was believed to be in a state of torpor until 17 Dec when the bird was determined to be dead; it was collected and placed in the Bierly collection.

Lark-Robin: Horned Lark: 19 Dec (10) Couchville lake, Long Hunter S.P., DVC (MLM), max. Blue Jay: 4 Feb (40) BAH (RWS), max. American Crow: 26 Dec (27,000) Bells Bend, DVC (CGD, et al.), max; the roost used by these birds was located in west Nashville near I-40 and 47th Ave., DVC, and was present through most of the period. Red-breasted Nuthatch: 1 Nov-28 Feb (1) Loretto, LWC (DKS, Donna N. Simbeck); 18 Dec (1) SWC (CCNWR CBC), only reports. House Wren: 25 Jan (1) Clarksville, MTC (ALH), only report. American Robin: 15 Jan (100,000+) Belle Meade, DVC (DFV), max; this roost present through most of period; 1 Jan (1,350) FCMR, MTC (DWB).

Pipit-Grosbeak: Water Pipit: 15 Jan (28) FCMR, MTC (DWB). Cedar Waxwing: 2 Feb (100+) Clarksville, MTC (AHH), max. Pine Warbler: 12 Feb (1) LBL, SWC (DWB), only report. Chipping Sparrow: 17 Dec (1) FCMR, MTC (DWB); 12 Feb (2) CCNWR (DWB), only reports. LAPLAND LONGSPUR: 15 Jan (48) FCMR, MTC (DWB), max. Brewer's Blackbird: 29 Dec-EOP (up to 13) LWC (DWB, et al.). Purple Finch: 27 Feb (32) BAH (RWS), max. Purple Finches were very scarce across the region, with only a few occurring at feeders; most reports were of 5 or fewer individuals. House Finch: present in large numbers in the region and occurring in many locations and remote towns where they have not been found in past years. Pine Siskin: 24-25 Dec (1) MUC (George R. Mayfield, Jr.); 18 Dec (2) SWC (CCNWR CBC), only reports, numbers very low in region and virtually absent at most feeders. American Goldfinch: reported in lower than normal numbers at feeders though 140 were banded by DFV in west Nashville from 31 Dec-EOP. Evening Grosbeak: 29 Dec (2) LWC (Andy J. Augustin, W. Royce Neidem, Jane Newell, Donette Sellan); 18 Feb (7) LBL, SWC (DWB), only reports.

Locations: BAH — Barnes Hollow, Putnam Co.; BWMA — Barkley Wildlife Management Area, Stewart Co.; CCNWR — Cross Creeks NWR, Stewart Co.; CFC — Coffee Co.; DVC — Davidson Co.; FCMR — Fort Campbell Military Reservation, Montgomery and Stewart Cos.; FKC — Franklin Co.; LBL — Land-Between-the-Lakes, Stewart Co.; LWC — Lawrence Co.; MTC — Montgomery Co.; MUC — Maury Co.; PIC — Pickett Co.; RUC — Rutherford Co.; SWC — Stewart Co.

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EASTERN RIDGE AND VALLEY REGION — This was our third consecutive mild winter. Temperatures during December and February were considerably above normal, while January was closer to normal. For a welcome change, rainfall was slightly above normal for the period. December precipitation was somewhat low, but the other two months more than made up for it. With the mild conditions, little snowfall occurred. The rainfall total for 1988 was 27% deficient at Tri-cities Regional Airport, in the northeastern corner of the region. Other areas fared about the same. According to a TVA press release, "the last four years, 1985-88, account for four of the six driest years (in the Tennessee River Watershed) since records began in 1890." Hopefully that drought is now behind us.

As is often the case, a mild winter results in rather dull birding which, in turn, causes birders' activity to decline. Reports were very brief this season. Northern irruptive birds were very scarce or absent. Ducks were reported to be "in their usual numbers for recent years" in the Chattanooga area, which boasts the region's best waterfowl habitat; but they were very scarce in the Johnson City area. Raptors were poorly reported. Gull numbers increased and two rarities were found among them. Some lingering "half-hardy" species were found, but fewer than might have been expected.

The biggest surprise of the season was the presence of FIVE *Selasphorus* hummingbirds, three of which successfully wintered. The other two were "air-lifted" to a hummingbird expert for banding and identification — these were both Rufous Hummingbirds. Details concerning the identity of the three wintering birds had not

been passed along to this compiler, and so identification beyond the genus level can not be made. All, or at least most, of these hummers were coming to feeders belonging to casual birders and their "discovery" was just by luck. That makes one wonder how many more were out there this winter and in past years. I'd bet that more hummingbird feeders will be closely watched next fall/winter.

Loon-Egret: Common Loon: 10 Dec (26) CHL (KHD, RLK), max. Pied-billed Grebe: 25 Feb (161) CHL (KHD), max. Horned Grebe: 10 Dec (82) CHL (KHD, RLK), max. Double-crested Cormorant: 10 Dec (1) CHL (KHD, RLK); 1 Jan (47-some duplication possible) HRA CBC (fide RAR); 6/15 Jan (1) Nickajack Lake, MAC (JTP/KHD, LHD); only reports. Great Blue Heron: 18 Dec (126) KNX CBC (fide JTT), high number for area. Great Egret: 18 Dec (1) KNX CBC (fide JTT); 20 Dec (6) SAB (KHD).

Waterfowl: Mute Swan: late Nov into Feb (1) Maryville Greenbelt Lake, Blount Co. (J. Anthony Koella), origin? Tundra Swan: 1 Jan-12 Feb (1) HRA (m. ob.). Snow Goose: 6 Dec (3 white, 3 blue) Indian Mountain S.P., Campbell Co. (Eva Dolcini fide JBO); 26 Dec (1 white) KNX (Paul S. Pardue); 2-5 white and 1-2 blue regular at HRA (fide KHD). Canada Goose: 10 Feb (1,338) Watts Bar Lake, MEC, Rhea & Roane Cos. (TWRA), max; a bird shot in Greene Co. on 24 Dec (fide Phine Britton, RLK) that was banded in the James Bay area of Canada indicates that some northern geese still winter in the region. Green-winged Teal: 11 Dec (375) HRA (KHD, LHD), max. American Black Duck: 8 Dec (300) Phipps Bend, Hawkins Co. (CPN); 14 Dec (1,058) HRA (TWRA), max. Mallard: 22 Dec (3,000) HRA (TWRA), max. Northern Pintail: 12 Feb (55) HRA (KHD), max. Northern Shoveler: 19 Dec (17) HRA (KHD, LHD), max. Gadwall: 10 Dec (490) CHL (KHD, RLK), max. American Wigeon: 14 Dec (413) HRA (TWRA), max. Canvasback: 2 Dec (18) HRA (KHD, LHD), max. Redhead: 9 Feb-EOP (2-4) JNC (LHTOS); 12-19 Feb (11-45) CHL (KHD, Albert M. Jenkins); 26 Feb (10) Jefferson Co. (J. Anthony Koella). Ring-necked Duck: 2 Dec (400) HRA (KHD, LHD), max. Greater Scaup: 17 Feb (4) BOL (BLC); 25 Feb (310) CHL (KHD), max. Lesser Scaup: 25 Feb (850) CHL (KHD), max. White-winged Scoter: 6 Jan (6) BOL (BLC), only report. Hooded Merganser: 11 Dec (215) HRA (KHD, LHD); 17 Dec (260) Cove Lake, Campbell Co. (CPN, RC); 27 Dec (286) Kingston Steam Plant, Roane Co. (Audrey R. Hoff); the last 2 records were unusually large flocks for the KNX area (fide CPN). Common Merganser: 26 Dec (1) Nickajack Lake, MAC (JTP); 1 Jan (2) HRA CBC (fide RAR); 12 Jan/17 Feb (1/2) BOL (RLK/BLC); only reports. Ruddy Duck: 10 Dec (113) CHL (KHD, RLK), max.

Vulture-Barn Owl: Black Vulture: 1 Jan (45) Ten Mile, MEC (CPN, RC); 21 Jan (250+) coming off roost near Boone Dam, WGC-Sullivan Co. line (LHTOS). Peregrine Falcon: 15 Jan (1 im) Raccoon Mountain, MAC (KHD, LHD); 16 Jan (1) HRA (J. Craig Watson, Donald L. Rush, Jr.). American Coot: 14 Dec (2,265) HRA (TWRA), max. Sandhill Crane: about 25 wintered on Hiwassee Island, MEC & "another good spring flight" occurred in the CHA area, but numbers had not been compiled at this writing (fide KHD); 17-24 Feb (100) LOC (Julie Faulk). LESSER GOLDEN-PLOVER: 4 Dec (1) Tellico Lake, Monroe Co. (Audrey R. Hoff, Ron D. Hoff), latest ever recorded in the state. Least Sandpiper: 18 Feb (10) SAB (Albert M. Jenkins), max; irregular & in low numbers at usual wintering sites of HRA, SAB (fide KHD). Dunlin: 11 Dec (100) HRA (KHD, LHD), max, numbers

declined to 40 by 28 Jan (R. John Henderson); 31 Dec (4) BOL (BLC). Common Snipe: 20 Dec (22) SAB (KHD), max, but low for this site. Bonaparte's Gull: 27 Jan (2,500) CHL (Lenny Kafka), extremely large number. Ring-billed Gull: 2,000+ on CHL (KHD) & 3,000+ on Fort Loudoun Lake, LOC and Knox Co. (JTT) are considered unusually high numbers. GREAT BLACK-BACKED GULL: 24-26 Dec (1 im) CHL (*KHD et al.), 4th documented state record (see *Migrant* 59:3, 1988). BLACK-LEGGED KITTIWAKE: bird found 30 Nov (see Fall report) seen irregularly to 26 Jan on Fort Loudoun Lake, LOC and Knox Co. (RC, *DJS, et al.). Mourning Dove: 21 Feb (recently fledged yg killed by dog) JNC (fide Sally Goodin, **); nest with 2 yg that hatched on 15 or 16 Feb, yg fledged 4 Mar, in CHA (Edwin E. Hughes fide KHD); both indicate earlier than normal nesting. Common Barn-Owl: fresh pellets collected regularly at 1 JNC site (fide FJA).

Hummingbirds: RUFOUS HUMMINGBIRD: 3-9 Dec (1 ad female) CHA (fide LHD); 6-8 Dec (1 im male) JNC (RLK); both birds, which had been present at feeders for several weeks, were captured and flown to New Orleans, Louisiana, where they were banded and identified by Nancy L. Newfield (fide RLK); 3rd and 4th state records, details to be published. *Selasphorus* sp.: after the above records were publicized, 3 additional hummingbirds were reported and successfully wintered at feeders — 2 in CHA (fide KHD) & 1 in KNX (Jean Chesney fide JBO); at this writing, documentation had not been submitted, so for now they will be considered *Selasphorus* species; details on these sightings should also be published.

Passerines: Purple Martin: 24 Feb (1) KNX (fide JBO), ers. Red-breasted Nuthatch: 2 reports in Jan from KNX area (fide CPN); 1 Jan (1) HRA CBC (fide RAR); only reports. House Wren: 6 Dec/24 Jan (2/1) CHA (R. John Henderson); 11 Jan (1) Conklin, WGC (RLK); 26 Jan (1) Telford, WGC (BLC). American Robin: especially numerous all period in JNC area (RLK). Brown Thrasher: only 4 reports in JNC area (fide RLK). Cedar Waxwing: 1 Jan (1,406) HRA CBC (fide RAR), max. Loggerhead Shrike: 14 Dec/17 Jan (4/6) WGC (RLK, BLC), above average numbers. Orange-crowned Warbler: 3 Jan (1) Candies Creek, HRA, Bradley Co. (J. Craig Watson, Donald L. Rush, Jr.). Yellow-rumped Warbler: unusually high numbers present in KNX area (fide CPN). Common Yellowthroat: 7 Dec (1) Austin Springs, WGC (BLC). Vesper Sparrow: 22 Dec/3 Feb (1) Telford, WGC (BLC); 26 Dec (1) Sequatchie Valley, MAC (JTP); 1 Jan (2) HRA CBC (fide RAR). Lincoln's Sparrow: 1 Jan (1) HRA CBC (DJS). Northern Oriole: 18 Dec-EOP (1 im male) KNX (Lou Fuller, Don Powers), at feeder. Purple Finch: very low numbers regionwide. Pine Siskin: a few reports of up to 5 birds at feeders during Dec & Jan in KNX area (fide JBO); 1 Jan (11) HRA CBC (fide RAR), only CHA area report; 17 Feb (12) BOL (BLC), only JNC area report. Evening Grosbeak: no reports.

Addendum: SHORT-EARED OWL: 28 Oct 1988 (1 found injured, later died) Piney Flats, Sullivan Co. (fide JWC), 3rd JNC-Elizabethton area record.

Locations: BOL — Boone Lake, Sullivan & Washington Cos.; CHA — Chattanooga; CHL — Chickamauga Lake, Hamilton Co. portion; HRA — Hiwassee River Area, primarily Meigs Co., but also Bradley, McMinn & Rhea Cos.; JNC — Johnson City; KNX — Knoxville; LOC — Loudon Co.; MAC — Marion Co.; MEC — Meigs Co.; SAB — Savannah Bay, Hamilton Co.; WGC — Washington Co.

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EASTERN MOUNTAIN REGION — This was a fairly mild winter. Temperatures in December and February were near or slightly above normal. However, January was exceptionally mild. Precipitation was less than normal for December, but amounts in January and February were a little above average. Snowfall in the mountains was well below average. Roan Mountain had two snowstorms in February resulting in accumulations of over 15 inches.

Waterfowl were down in numbers. Winter finches were almost nonexistent. After last winter's abundance of Pine Siskins, there was only one record reported for the current period.

Loon-Hawk: Common Loon: 1 Dec (3) WTL (RLK); 31 Dec (1) SHL (JWC). Horned Grebe: 31 Dec (2) SHL (JWC). Canada Goose: a max of 76 reported on WIL (LHTOS). Green-winged Teal: 31 Dec (1) SHL (JWC). American Black Duck: 10 Dec (6) WIL, very low; 31 Dec (12) SHL (JWC). Northern Pintail: 1 Dec (1) WIL (RLK), only report. Gadwall: 31 Dec (1) SHL (RPL, GDE). American Wigeon: none reported after the 31 Dec BRI CBC. Redhead: 16 Feb (2) Erwin, Unicoi Co. (FJA). Ring-necked Duck & Lesser Scaup: low numbers. Common Goldeneye: 10 Dec (1) Ripshin Lake, Carter Co. (FJA). Bufflehead: a max of 87 reported on WIL (LHTOS). Hooded Merganser: 10 Dec-26 Jan (15-8) Ripshin Lake, Carter Co. (FJA, James W. Brooks, CFW); 31 Dec (30) SHL (JWC); 20 Feb (7) Watauga River, Carter Co. (CFW). Ruddy Duck: 31 Dec (1) SHL (JWC). Bald Eagle: 17 Dec (1 ad) ELI CBC; 21 Jan (1 im) WTL (FJA, Cathi Sullins). Red-shouldered Hawk: 1 wintered along Watauga River (FJA, BLC); 31 Dec (1) BRI CBC.

Snipe-Waxwing: Common Snipe: small numbers (1-7) wintered along Watauga River (LHTOS). American Woodcock: 22 Feb-EOP (1, giving courtship flight) SHL (RPL). Bonaparte's Gull: 2 Dec (2) ELI (GDE). Red-headed Woodpecker: 1 Dec (1) WIL (RLK). Red-breasted Nuthatch: only 2 low elevation records all period (RLK, BLC). Golden-crowned Kinglet: good numbers. Hermit Thrush: numerous. American Robin: numerous. Cedar Waxwing: fairly common, but no large flocks.

Shrike-Grosbeak: Loggerhead Shrike: 17 Dec (1) ELI CBC; 31 Dec (5) BRI CBC; 6 Jan (1) ELI (Glen W. Swofford, CFW). Fox Sparrow: low, no reports other than ELI and RNM CBC. Purple Finch: very scarce in ELI area, only 1 on ELI CBC and none on RNM CBC; 31 Dec (20) BRI CBC, max. Red Crossbill: no reports. Swamp Sparrow: 31 Dec (1) SHL (RPL, GDE). White-crowned Sparrow: unusually scarce in SHL area. Pine Siskin: 17 Dec (1) ELI CBC, only report. Evening Grosbeak: no reports.

Locations: BRI — Bristol; ELI — Elizabethton; RNM — Roan Mountain, Carter Co.; SHL — South Holston Lake, Sullivan Co.; WIL — Wilbur Lake, Carter Co.; WTL — Watauga Lake, Carter Co.

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ISSN 0026-3575

THE MIGRANT

A QUARTERLY JOURNAL
DEVOTED TO TENNESSEE BIRDS

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Birds

Published by
THE TENNESSEE
ORNITHOLOGICAL
SOCIETY

EPTEMBER 1989
VOL. 60, NO. 3

THE MIGRANT

A QUARTERLY JOURNAL OF ORNITHOLOGY

FIRST ISSUE PUBLISHED IN JUNE 1930

PUBLISHED BY

THE TENNESSEE ORNITHOLOGICAL SOCIETY

Founded at Nashville, Tennessee on 7 October 1915
The T.O.S. is a non-profit, educational, scientific,
and conservation organization.

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Published quarterly (March, June, September, and December).
Printed by Tennessee Industrial Printing Services, Inc., 51 Miller Ave., Jackson, TN 38305.

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THE MIGRANT

Published by the Tennessee Ornithological Society,
to Record and Encourage the Study of Birds in Tennessee.
Issued in March, June, September, and December.

VOL. 60 September 1989 NO. 3

The Migrant, 60(2):69-71, 1989

SECOND TENNESSEE BREEDING RECORD OF SAVANNAH SPARROW, WITH COMMENTS ON ITS EXPANSION INTO THE SOUTHERN APPALACHIANS

JUN 04 1990
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Richard L. Knight
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The breeding range of the Savannah Sparrow (*Passerculus sandwichensis*) in the eastern United States is described as extending south to "...Kentucky, eastern Tennessee, western Virginia, western Maryland..." (A.O.U. 1983:706). The inclusion of Tennessee in this range was based on one record: a nest with three eggs found on 2 July 1973 in Hawkins County (Alsop 1978). While doing field work for the Tennessee Breeding Bird Atlas Project, I discovered the state's second breeding record. This note documents that record and briefly discusses the species' breeding range and status in Tennessee and nearby states, primarily within the Southern Appalachian Mountain Region.

On 14 June 1987 I observed a Savannah Sparrow singing from a fence separating two grassy upland fields near Limestone, Washington County, Tennessee. This bird was seen again on 23 and 29 June and was heard singing on the latter date. Then on 10 July, after the fields had been mowed for hay, two adult Savannah Sparrows were seen with two fledglings. The young birds resembled the adults, but had a downy appearance and shorter tails, and could flutter only a few meters at a time. This site is 11 km southwest of Jonesborough and about 30 km south-southeast of the Hawkins County site. The elevation is 445 m and the terrain consists of gently rolling hills adjacent to a creek bottom.

Portions of these fields were dominated by several different forbs; however, the Savannah Sparrows were found in a grassy section with no forbs. The only other birds in the same fields were Dickcissel (*Spiza americana*), Grasshopper Sparrow (*Ammodramus savannarum*), Red-winged Blackbird (*Agelaius phoeniceus*), and Eastern Meadowlark (*Sturnella magna*). One interesting contrast between the two Tennessee breeding records is that Alsop (*op cit.*) mentioned not hearing even a single song of the Savannah Sparrow despite numerous hours spent at the Hawkins County site, whereas I heard the Limestone bird sing several times on two of the three visits before the fledglings were found. A search of this site in June 1988 failed to find this species, perhaps because the fields were heavily grazed.

There are two other summer sight records in Tennessee that I am aware of: one bird on 13 June 1972 near Elizabethton in Carter County (previously unpublished record in the files of the Lee R. Herndon Chapter of T.O.S.) and one bird on 2 July

1988, but not found on later visits, in northwestern Cocke County (Knight 1988). All four of these records are in the Ridge and Valley Region of northeast Tennessee.

Alsop (1978) summarized the breeding status of the Savannah Sparrow in Kentucky, Virginia, West Virginia, and Maryland. Subsequent breeding records and/or summer sightings have come from these states (Maryland excluded from this discussion) plus North Carolina (Figure 1); therefore, further discussion seems warranted.

Kentucky: Three breeding records are known: adult feeding a fledgling on 28 June 1969 in Oldham County (Stamm and McConnell 1971), "one nest" in the summer of 1973 in Fayette County (Kleen 1973), and a pair, one of which "carried food and was agitated," on 13 July 1988 in Lewis County (Stamm 1988:66). In addition, continued summer sightings of territorial males in Oldham and Jefferson Counties suggest that nesting "takes place at least occasionally" (B. Palmer-Ball *pers. comm.*). These counties are all in northern Kentucky. Allaire (1980) considered Savannah Sparrow as a likely candidate for future breeding on reclaimed surface coal mines in eastern Kentucky. *Virginia*: Three breeding records are known for this state also: nestlings on 15 June 1973 in Highland County, flightless young on 19 June 1975 in Tazewell County, and "adults carrying food to nest site and removing fecal sac" on 21 June 1979 in Augusta County (Kain 1987:111). Recent summer sightings come from Carroll, Montgomery, Smyth, and Washington Counties. These are all in the Mountains and Valleys Region of western Virginia, where the Savannah Sparrow is considered a "rare and local summer resident, apparently increasing in recent years" (*op. cit.*). *West Virginia:* Hall (1983:148) states that "The main summer range of the Savannah Sparrow is along the axis of the [Allegheny Mountains]...south to northern Greenbrier County and occasionally Monroe County" in eastern West Virginia. There are "definite nesting records" from eight counties and summer sightings from at least 13 other counties, with the southernmost breeding record from Raleigh County. *North Carolina*: LeGrand (1983) found single territorial Savannah Sparrows at three sites in Alleghany County, in northwestern North Carolina, on 14 June 1983. A singing male was present at one of the same sites on 19 May 1985, but "conclusive breeding evidence" is still lacking for this state (H. LeGrand *pers. comm.*)

An analysis of the 1965-1979 Breeding Bird Survey data indicated a stable continental population of Savannah Sparrow, although there was a local increase in Ohio (Robbins et al. 1986). Southward expansion in the mid-west (Peterjohn 1983) accounts for the species' presence in northern Kentucky and western West Virginia. The apparent gap between these locations and the string of sites from eastern West Virginia to northeastern Tennessee may indicate expansion from another direction (down the Appalachian Mountains from western Pennsylvania — see Hall 1985) or may simply represent gaps of coverage in a broad front of expansion. "Since the 1950s this species has expanded its range westward and downslope" within West Virginia (Whitmore and Hall 1978:8). Expansion into the other states discussed here apparently began in the early 1970s. Further field work is needed to clarify the picture.

ACKNOWLEDGMENTS

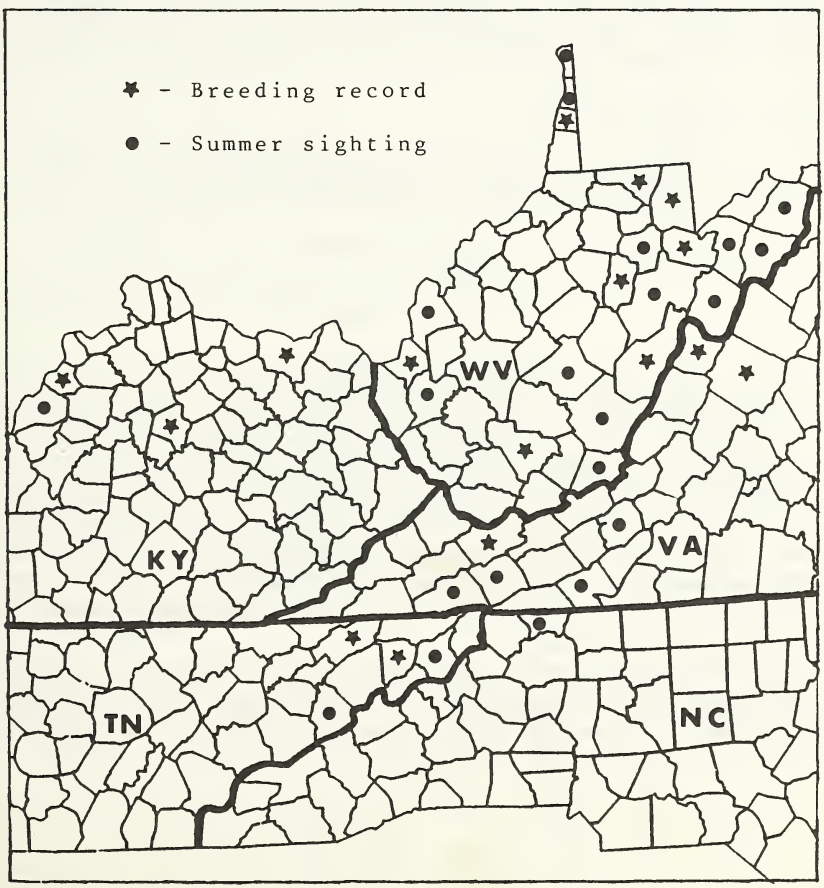
I thank Brainard Palmer-Ball, Jr. and Harry E. LeGrand, Jr. for providing information on records from Kentucky and North Carolina, respectively. I also thank Charles P. Nicholson for plotting the base map of counties and T. David Pitts for helpful suggestions.

LITERATURE CITED

ALLAIRE, P.N. 1980. Bird species on mined lands. Institute for Mining and Minerals Research, Univ. of Kentucky, Lexington.

ALSOP, F.J., III. 1978. Savannah Sparrow (*Passerculus sandwichensis*) nesting in upper east Tennessee. Migrant 49:1-4.
AMERICAN ORNITHOLOGISTS' UNION. 1983. Check-list of North American birds, 6th ed. Allen Press, Lawrence, Kansas.
HALL, G.A. 1983. West Virginia birds. Carnegie Mus. Nat. Hist. Spec. Publ. No. 7, Pittsburg.
HALL, G.A. 1985. Appalachian region. Am. Birds 39:911-914.
KAIN, T. (ed.) 1987. Virginia's birdlife: An annotated checklist. Va. Soc. Ornithol.
KNIGHT, R.L. 1988. The season: Eastern ridge and valley region. Migrant 59:126-129.
KLEEN, V.M. 1973. Middlewestern prairie region. Am. Birds 27:874-878.
LEGRAND, H.E., Jr. 1983. Savannah Sparrows on territory in Alleghany County, N.C. Chat 47:72-73.
PETERJOHN, B.G. 1983. Middlewestern prairie region. Am. Birds 37:992-995.
ROBBINS, C.S., D. BYSTRAK, P.H. GEISSLER. 1986. The breeding bird survey: Its first fifteen years, 1965-1979. Fish and Wildlife Serv. Res. Publ. 157, Washington, D.C.
STAMM, A.L. 1988. The nesting season, summer 1988. Ky. Warbler 64:61-67
STAMM, A.L. and D. MCCONNELL. 1971. Savannah Sparrows breeding in Oldham County. Ky. Warbler 47:45.
Whitmore, R.C. and G.A. HALL. 1978. The response of passerine species to a new resource: Reclaimed surface mines in West Virginia. Am. Birds 32:6-9.
Accepted 23 January 1989.

Figure 1. Location (by county) of breeding and summer sight records of Savannah Sparrow in Tennessee (TN), North Carolina (NC), Virginia (VA), West Virginia (WV) and Kentucky (KY).



The Migrant, 60(3):72 , 1989.

PRESIDENT'S MESSAGE

Barbara W. Finney, President

In 1915, the Tennessee Ornithological Society was organized "to promote the science of ornithology in Tennessee, to publish the results of its investigations, to stand for the passage and enforcement of wise and judicious laws for bird protection, and to promote bird study and protection by any other means that may from time to time be deemed advisable."

Now is an appropriate time to review the accomplishments of 75 years and to plan for the future. We hope that many chapters will compile their histories or update existing ones. While it takes the involvement and commitment of each individual, accomplishments are greater when issues are addressed through the organization as a whole.

To keep TOS functioning requires the time and talents of the professional ornithologists, the count compilers, the program givers, the newsletter editors, the atlasers, the feederwatchers, the cookie bakers and all of the rest who volunteer their time. All of TOS is made up of volunteers. The richness and variety of your interests and your contributions and the opportunity to share an interest in birds with people from across Tennessee are the major benefits of being a part of TOS. You, the members, are the major resource of the Tennessee Ornithological Society.

The Migrant, 60(3):72-73 , 1989.

ANOTHER CONSIDERATION OF YELLOW-BILLED CUCKOO CASUALTIES AT A TENNESSEE TV TOWER

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Hamel (1987) commented on an unusually large number of Yellow-billed Cuckoos (*Coccyzus americanus*) recorded at a Tennessee TV tower during August-November 1985. Twenty-seven cuckoos were recorded (previous seasonal highs averaged five birds), most were represented only by their rectrices, and only five individuals "had obviously died in collision with the tower." Hamel noted that the partial carcasses were found directly beneath the tower, that emerging periodical cicadas might have increased the numbers of cuckoos in the vicinity of the tower, and seemed to suggest that Great Horned Owls (*Bubo virginianus*), which normally scavenge among the tower casualties, acquired the cuckoos elsewhere and brought them to the tower site to eat.

Hamel's suggestion that an irregular environmental variable like emerging of cicadas might affect bird populations is a valuable insight, but I believe that bird remains found at tower sites should be regarded as tower kills unless strong,

unambiguous evidence exists to the contrary. Otherwise, speculations and second-guessings could be raised about any record that differs from a perceived norm.

Skewed numbers of birds recorded at towers, caused by larger than normal yearly, seasonal, and single-night kills are not unusual. For example, at the WCTV tower in Leon County, Florida, numbers of Yellow-rumped Warblers (*Dendroica coronata*) varied greatly during one 8-year period (Terrill and Crawford 1988). Of 477 birds, 264 occurred in one winter; the next highest counts were 76 and 65. These proportions are nearly identical to those of the cuckoos. Again from WCTV, there are the examples of 104 Gray-cheeked Thrushes (*Catharus minimus*) (of a 25-year spring total of 156) on 2 May 1964, and 880 Palm Warblers (*D. palmarum*) (of a 25-year total of 1827) on 9 October 1955 (Stoddard and Norris 1967, Crawford 1981).

Plucking of tower kills by Great Horned Owls has been noted before, by the late Herbert L. Stoddard, Sr. at WCTV. His unpublished WCTV tower notes of 30 August 1957 record these observations (emphases Stoddard's): "The *Horned Owls* really made a *haul last night*. They got *most* of the dead birds in *lighted area near tower* and over half of those in first *yards*.... A very interesting feature was that the Owls very *carefully picked* some *12 or more birds*. Can it be they *realized* there was a *large food supply on ground* & avoided eating *many feathers* as to do so would *limit capacity!* Picked up *whole* R.E. Vireo, as carefully picked as a Cooper's Hawk would do. *But* Owl left 2 feathers to *prove* identity! They frequently pulled off a *whole wing of a Red-eyed Vireo* and cast it aside with chunk of meat attached. On the other hand in my tests the owls frequently swallow small birds without leaving any feathers.... But the matter of *picking the birds roughly* when a great many *are everywhere in sight* explains the very many feather piles found in *large kills last year*." Thus, the owls at the Tennessee site, confronted with several cuckoos at a time, might similarly have plucked out the long tails of the cuckoos. The rectrices of Yellow-billed Cuckoos account for one-half of the birds' body length (Coues 1887) and would constitute a large, indigestible mass if eaten.

I suggest that in autumn 1985, for whatever reason, more cuckoos than normal hit the Tennessee tower, and that scavenging owls and possibly other animals partially plucked the birds before eating them. This seems a likely and more simple scenario than Hamel's.

LITERATURE CITED

COUES, E. 1887. Key to North American Birds. Boston: Estes and Lauriat.

CRAWFORD, R.L. 1981. Bird casualties at a Leon County, Florida TV tower: a 25-year migration study. Bull. Tall Timbers Res. Sta. 22:1-30.

HAMEL, P.B. 1987. An improbable number of Yellow-billed Cuckoo casualties at a Tennessee TV tower. Migrant 58:86-89.

STODDARD, H.L., and R.A. NORRIS. 1967. Bird casualties at a Leon County, Florida TV tower: an eleven-year study. Bull. Tall Timbers Res. Sta. 8:1-104.

TERRILL, S.B., and R.L. CRAWFORD. 1988. Additional evidence of nocturnal migration by Yellow-rumped Warblers in winter. Condor 90:261-263.

Accepted 9 June 1989.

The Migrant, 60(3):74, 1989.

REPLY TO CRAWFORD

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The number of Yellow-billed Cuckoos (*Coccyzus americanus*) recovered from the WSMV-TV tower in Nashville, Davidson Co., Tennessee in August-November, 1985, was so improbable than an exploration of the fact of their numbers was warranted. Indeed, the probability of recovering 27 cuckoos in a single season, assuming conditions in 1985 were representative of those in 1960-1984, was less than once in 100,000 years (log transformed data; mean = 1.75, standard deviation = 1.22, $Z = 18$, $p < 0.00001$)! I suggested that something other than simply collisions with the tower was involved, at least in part, in the large total. Crawford (*Migrant* 60(3):72-73, 1989) disagrees and marshalls contrary evidence from other towers.

I appreciate Crawford's attention to this work, and his sharing additional data with us. The work he discusses is important work in the area of analysis of TV tower casualties. The fact that he is not surprised at such a large number of cuckoo casualties is significant. Neither of us can prove our assertions, however. Data on TV tower casualties are reports of results, not investigations of causes. Examination of data for a particular species in a particular year, or comparisons of patterns of casualty records with environmental parameters, are merely correlative attempts at explanations. We cannot refute hypotheses in the usual scientific way, because the opportunity for control and replication is not frequently possible. So we speculate.

Crawford uses three cases to point out that distributions of casualties often consist of many low numbers and a few very large ones. All three cases involve passerine birds; none involves a non-passerine such a cuckoo. The most similar case, Yellow-rumped Warbler (*Dendroica coronata*), is not strictly comparable to the present one because it did not take place during migration and the species in question is a winter resident in the area of the Leon Co., Florida, TV tower. The other two cases are each of a large total on a single night, rather than a consistent pattern of high counts night after night during a single migration. I thus maintain my earlier suggestion that something else may have been going on a WSMV in 1985.

Our current work at WSMV involves continuing collections at the tower and studies that attempt to explain why the total numbers of birds recovered at the tower have become much less in recent years than in earlier ones.

Accepted 21 September 1989.

The Migrant, 60(3):74-75 , 1989.

SHARP-SHINNED HAWK DIES ENTANGLED IN VINES

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A juvenile male Sharp-shinned Hawk (*Accipiter striatus*) was found dead on Grassy Island (Obion County) of Reelfoot Lake, Tennessee on 20 November 1988. James Bramlett found the bird hanging head-down in a thick clump of sweet winter

grape (*Vitis cinerea*) vines at the edge of a wooded area; a vine was firmly wrapped around the neck of the hawk. Immediately after collection (with the vine still around the neck) the bird was frozen. The hawk was prepared as a study skin on 18 January 1989 by T. D. Pitts and placed in the University of Tennessee at Martin bird collection (UTMB No. 464). At the time of preparation it weighed 94 g; its total length was 285 mm, and its tail length was 133 mm.

The keel of the sternum protruded, no body fat was found, and the digestive tract was empty. No wounds or injuries were found. Mueller et al. (Bird-Banding 50: 34-44, 1979) found juvenile male Sharp-shinned Hawks in autumn to have an average tail length of 134 mm and an average weight of 98 g (± 5.8); the bird described here was of normal size but was slightly below average weight. Its position at the time of discovery and its body condition suggest the bird became tangled in the vines and died of either starvation or asphyxiation shortly before it was discovered.

Accepted 28 July 1989.

The Migrant, 60(3):74-80, 1989.

CONSTITUTION
of the
TENNESSEE ORNITHOLOGICAL SOCIETY

Organized October 7, 1915
As Amended May 2, 1987

ARTICLE I — NAMES AND PURPOSES

Sec. 1. This organization shall be called the Tennessee Ornithological Society.

Sec. 2. The purposes of this Society shall be to promote the science of ornithology in Tennessee, to publish the results of its investigations, to stand for the passage and enforcement of wise and judicious laws for bird protection, and to promote bird study and protection by any other means that may from time to time be deemed advisable.

ARTICLE II — MEMBERSHIP

Sec. 1. The membership shall consist of Active, Family, Sustaining, Life, Honorary, and Student Members, actively engaged in the study of ornithology in Tennessee or otherwise interested in the bird life of Tennessee.

Sec. 2. Family Memberships are available for couples, or parents and their children under 18 years of age.

Sec. 3. Any person of eminence in ornithology, or of outstanding merit in the Tennessee Ornithological Society may be elected as Honorary Member. Honorary Members may be elected only by a unanimous vote of the Board of Directors present and candidates' names must be presented to the Society at least three months prior to election. Such election shall be for life.

Sec. 4. A Student Member shall be a student enrolled in grades one through twelve.

Sec. 5. The Board of Directors is empowered to drop any member for sufficient cause by a vote of two-thirds of the voting members present.

ARTICLE III — DUES

Sec. 1. The annual dues for each class of membership shall be as set forth in the Bylaws.

Sec. 2. No initiation fee shall be required. New members shall pay a year's dues in advance upon acceptance. All dues thereafter shall be payable in advance, as of January 1.

Sec. 3. Any member in arrears for dues one year is automatically dropped from the rolls. Such person may be reinstated by paying current dues.

ARTICLE IV — BOARD OF DIRECTORS

Sec. 1. All business and property of the Society shall be managed by a Board of Directors to be elected by the membership of the Society, together with the President who shall be ex officio Director.

Sec. 2. There shall be elected from each chapter a Director for each ten members or major part thereof. No chapter shall have the right to elect more than five members to this board. Each Director shall serve for two years or until a successor is elected. Chapters with more than one Director shall elect, as nearly as possible, one-half of its Directors each year.

In addition to the Directors elected by the chapters, three Directors from the State at large shall be nominated by the Board of Directors and submitted to the annual meeting for election, but any member may exercise the privilege of nomination to the Board of Directors at this annual meeting.

Sec. 3. The Board of Directors shall have charge of all funds raised for endowment. The annual dues of the members shall be used for the current expenses of the Society, but only the income from the endowment funds may be used for this purpose. The principal of endowment funds shall remain intact from year to year. The Board of Directors shall appoint a Finance Committee and may appoint other such committees as they deem necessary for raising endowments or for other matters relating to finances. The personnel of these committees shall be selected by the Board of Directors prior to the annual meeting.

ARTICLE V — OFFICERS

Sec. 1. The Officers of this Society shall be a President, a Vice-President for each Grand Division of the State, a Secretary, a Treasurer, a Curator, an Editor, and a President-Elect. These officers shall serve for a period of two years, except the President-Elect who will serve for one year only before assuming the office of President. Upon action of the report of the Nominating Committee, a slate of officers shall be proposed by the Board of Directors and submitted to the Society at its annual meeting, but any member shall have the right to put in nomination the name of any other members from the floor. The term of the offices shall begin at the end of the business meeting at which they are elected. The retiring Treasurer and Secretary shall prepare and turn over their records to their successor within thirty days. Officers other than the President have no vote on the Board of Directors unless also an elected Director.

Sec. 2. Vacancy in any office shall be filled by the Board of Directors, except in the office of the President. In that case, the Vice-President from the Division in which the President had membership shall succeed.

Sec. 3. The President shall have general supervision of the affairs of the Society and shall preside at its meetings. The President shall be Chairman ex officio of the Board of Directors. The Chairman is expected to arrange by correspondence some weeks in advance the agenda for the meetings of the Board.

Sec. 4. The Vice-Presidents shall give any assistance the President may solicit from them. The Vice-President from the Division in which the President has membership shall act in the President's absence.

Sec. 5. The Secretary shall keep the minutes of the meetings, attend to official correspondence, prepare notices of meetings, and work to create interest in the activities of the Society.

Sec. 6. The Treasurer shall collect the dues from all members and receive any other funds that may come to the Society; give attention to maintaining and increasing the membership; pay all bills upon their approval by the President; present to the Society an annual statement, as of the last day of the month preceding the annual meeting, of all receipts and expenditures. Upon its audit by the Finance Committee, this statement shall be filed with the Secretary. The Treasurer shall submit semi-annual reports to the Board of Directors.

Sec. 7. The Curator shall have charge of all specimens that may come into the possession of the Society and shall be the keeper of all literature, field records, papers and the like that may come into the possession of the Society.

Sec. 8. The Editor shall secure and prepare, with the aid of the editorial staff, suitable material for publication in the Society's quarterly, *THE MIGRANT*, and arrange for the printing and mailing of same.

Sec. 9. The President-Elect shall not be an officer of the Board of Directors and shall have no voting voice in that body, unless serving in some other capacity. The President-Elect should attend the meetings of the Board of Directors, become acquainted with the business of the Society, and attend all meetings.

ARTICLE VI — COMMITTEES

Sec. 1. A Nominating Committee shall be appointed by the President prior to the end of the calendar year in which the new President assumes office. Said committee shall serve for a period of two years or until the next President takes office.

It shall be the duty of this committee to propose to the Board of Directors at the annual meeting in years of even date a President-Elect, to take office as President the following year, and in years of odd date to propose to the Board a complete slate of officers. The President-Elect shall be chosen

from that Division of the State whose turn it will be to receive the presidency for a full two year term. Nominations from the floor for any office may be made at the annual meeting.

Sec. 2. The Finance Committee, appointed by the Board of Directors upon recommendation of the President, shall consist of five members, of which number the Treasurer and the Chairman of the Endowment Committee, if there be one, shall be members ex officio.

The Committee shall make an annual audit of the books and records of the Treasurer, including a physical count of such assets as are disclosed thereby, and at such other times as requested by the President. Such special request is to be approved by the Board of Directors. Said annual examination and audit shall be made at such time as will accurately disclose the condition of the Treasurer's books and records as of the end of an operating or fiscal year. A report of same is to be furnished the President prior to the annual meeting. The Chairman of the Finance Committee shall report at the annual meeting on the audit taken.

The Committee shall review and evaluate annually the intended purpose, nature and then current use, of any and all endowment funds. A report of such review shall be made in writing to the President.

The Committee shall advise the Treasurer at such times as it deems appropriate on the transfer of cash funds from a checking to a savings account in a banking corporation or a Federal savings and loan association. The savings balance to be carried in any single institution is not to exceed the amount of deposit insured.

The Committee shall recommend to the President the establishment, maintenance, or termination, of any so-called "special funds" as may exist, whether active or inactive.

ARTICLE VII — MEETINGS AND QUORUM

Sec. 1. The Society shall hold an annual meeting each Spring. A fall meeting may also be arranged at such time and place as the Board of Directors may decide.

Sec. 2. Special meetings may be held upon the call of the President after consulting with members of the Board of Directors.

Sec. 3. Fifteen Voting Members shall constitute a quorum for the transaction of business. Voting Members are defined as Active, Sustaining, Life, Honorary and Family Memberships, which shall have one vote. The affirmative vote of a majority of the Voting Members present at any regular meeting shall suffice for the passage of any matter except that given in Article IX.

Sec. 4. A quorum of the Board of Directors shall be at least nine Directors present in person or represented by proxies in writing. At least six of said nine members shall be present and vote in person. The President shall request proxies for each meeting. The affirmative vote of a majority of the Directors present at any regular meeting shall suffice for the passage of any matter except that given in Articles II, IX, X and XI.

Sec. 5. The rules contained in the current edition of *Robert's Rules of Order Newly Revised* shall govern the Society in all cases to which they are applicable and in which they are not inconsistent with this Constitution and Bylaws and any special rules of order the Society may adopt.

ARTICLE VIII — CHAPTERS

Sec. 1. Local chapters may be established at any point in the State where there is sufficient interest and proper leadership. A Chapter, to be recognized as such, must maintain a membership of ten or more in good standing in the Society.

Sec. 2. The meetings of such chapters may be conducted as outlined for the society as a whole, or they may establish their own rules of procedure. They shall elect their own local officers.

Sec. 3. Dues for local chapters shall conform to those prescribed in Article III, Sec. 1. They shall be collected by the lcoal treasurer and sent to the State Treasurer.

Sec. 4. The organization of local chapters is encouraged by the Society. Those who enroll in local chapters shall be members of the Society and are expected to support the state-wide work of the Society.

ARTICLE IX — AMENDMENTS

Any chapter through its secretary, or any Voting Member, may propose an amendment to the Constitution by notifying all officers, Directors, local chapter presidents and secretaries, of the proposed change, in writing by first class mail, thirty days before a meeting of the Board of Directors. The Secretary of the Society shall furnish names and addresses of these parties on request.

The President shall present the proposed amendment to the meeting of the Board of Directors, who may, by two-thirds vote, accept, reject, or revise, in whole or in part, the proposed change. If accepted as presented or revised, the Board of Dirctors shall, through the President, present the resulting proposal to the following regular meeting of the membership. If rejected, the proponent may present the proposal to the membership, providing the foregoing notification requirement has been met. In either case, the proposal would become an amendment to the Constitution if approved by two-thirds of the Voting Members present at the regular meeting.

ARTICLE X — BYLAWS

The Board of Directors may adopt such Bylaws for the government of the Society as may be necessary provided they do not contravene any part of the constitution. Bylaws or amendments thereto must be supported by a two-thirds vote. The subject matter for such Bylaws shall be submitted in writing thirty days before a meeting of the Board of Directors to all Directors and to local chapter's presidents and secretaries. Failing such submission, adoption must be by unanimous vote of those present.

ARTICLE XI — DISSOLUTION

Sec. 1. Ninety days prior to the annual or special meeting at which action to dissolve is to be voted on, the Secretary of the Society shall notify by first class mail the three Vice-Presidents, the Directors from the State-at-large, and the president of each chapter whose responsibility it will be to notify all Directors representing that chapter.

Sec. 2. The Board of Directors, by a two-thirds vote of those present, may adopt a proposal to dissolve the Society.

Sec. 3. A simple majority of the votes of members present at the meeting is required to approve the proposal dissolving the Society.

Sec. 4. Assets of the Society are to be distributed to an organization which qualifies as a tax exempt organization under Section 501 (c)(3) of the 1954 Internal Revenue Code, as amended.

END

BYLAWS
of the
TENNESSEE ORNITHOLOGICAL SOCIETY

DUES

The annual dues to be paid to the Tennessee Ornithological Society by each member shall be as follows:

Active Member, $10.00; Sustaining Member, $20.00; Student Member, $5.00.

A Family Membership shall pay annual dues to the Society of $12.00 and shall receive one copy of each issue of THE MIGRANT.

A member may become a Life Member by a single payment of $200.00 to the Society's endowment fund or by four consecutive annual payments of $50.00 each. The member is to pay only the total amount due for Life Membership at the time of the first payment.

Libraries and similar subscribers shall pay $15.00 per year.

Honorary Members shall not be liable for dues.

Local chapters may add to the dues of members whatever is necessary to cover the expenses of the local chapter.

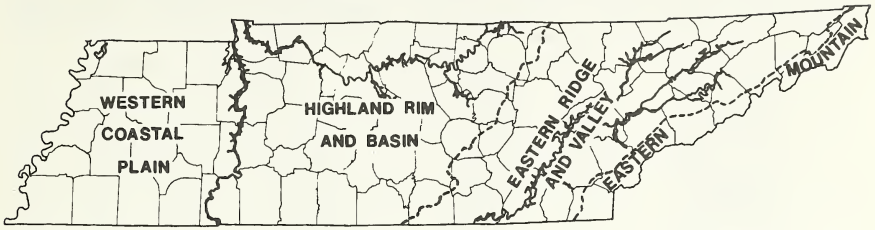
All members and subscribers shall receive THE MIGRANT. No member who has failed to pay his dues by April 1 shall receive any issue of THE MIGRANT beyond the March issue, until such dues are paid. It shall be the duty of the Treasurer to keep the Secretary up-to-date on the membership in good standing.

(The charter of the TENNESSEE ORNITHOLOGICAL SOCIETY was granted by the State of Tennessee, December 14, 1938, and recorded on Page 281 of the Corporation Record Book, Miscellaneous U. No. 10656.)

The Migrant, 60(3):81-92, 1989.

THE SEASON

John C. Robinson, Editor



SPRING: 1 MARCH-31 MAY 1989

Localized flooding occurred at scattered sites throughout the state this spring as rainfall amounts approached or exceeded normal levels. A wide range of temperature extremes was documented by the regional compilers, and snowfall as late as 7 May was noted in the two easternmost regions of the state.

Although most observers are submitting their reports on time, there are still a few observers who submit their data well beyond the due date. This practice not only delays the printing schedule of *The Migrant*, but it may also result in some observations being omitted from The Season report. All observers are urged to submit their data in a timely manner. Documentation of unusual sightings was fairly consistent, but again, at least one noteworthy record of a very rare species had to be omitted from the text of this report due to lack of documentation. Please submit details of all unusual sightings to your regional compiler.

The 1989 spring season saw a continuation of the studies on eagle and heron nesting activities, as summarized in the Western Coastal Plain Region report. The number of active heron rookeries in west Tennessee was especially encouraging. Also of note this season was the wide range of species that arrived notably early or departed notably late (e.g., dowitchers and White-winged Scoters in east Tennessee, Water Pipit in west Tennessee, and Northern Parula in middle Tennessee, among others). This spring also saw the return of Scissor-tailed Flycatchers in east and middle Tennessee and Smith's Longspur in west Tennessee. Two Long-eared Owls in the Great Smoky Mountains National Park represented one of very few records for the Eastern Mountain Region. A Ruff lingered for 4 days at Austin Springs, thus marking the 2nd east Tennessee record for this species.

As a printing aid, the following abbreviations are used in the text: ad — adult; EOP — end of period; ers — earliest reported sighting; lrs — latest reported sighting; max — maximum 1-day count during period; m. ob. — many observers; NWR — National Wildlife Refuge; ph — photographs; SBC — Spring Bird Count (except in Western Coastal Plain Region); S.P. — State Park; WMA — Wildlife Management Area; * — documented record.

WESTERN COASTAL PLAIN REGION — Climatic conditions did not appear to play an important part in migration this season. A great deal of interest was focused, therefore, on nesting birds such as House Finches, Great Blue Herons, egrets and, most notably, the Bald Eagle. Visitors included a Northern Saw-whet Owl, a Sandhill Crane and an Eared Grebe. The thoroughness and accuracy of sightings have been enhanced by the dedication of observers. Thank you very much for your work and timely reports.

Table 1. 18 April 1989 aerial survey of heron colonies in western Tennessee.

Colony Number*/County	Species	Total Nests	Confirmed Active Nests
26/Benton	GBH	353	310
27/Carroll	GBH	16	14
28/Carroll	GBH	6	6
29/Carroll	GBH	Inactive	—
30/Carroll	GBH	40+/-	19
31/Carroll	GBH	Inactive	—
32/Weakley	GBH	Inactive	—
33/Carroll	GBH	1	1
34/Weakley	GBH	49	44
35/Weakley	GBH	5	4
36/Weakley	GBH	61	42
37/Weakley	GBH	7	6
38/Henry	GBH	Inactive	—
39/Henry	GBH	9	7
40/Lake**	GBH	?	?
	GE	?	?
41/Lauderdale	GBH	101	90
A/Lauderdale**	GBH	366 (both	32
	GE	species)	28

* Colony numbers correspond with Tennessee Valley Authority survey system.
** Photographic film did nor clearly differentiate the species. It appeared, however, that the Great Egret was the predominant species.

Grebe-Merganser: Horned Grebe: 10 Mar (32) Paris Landing S.P., Henry Co. (AHH). EARED GREBE: 25 Mar (1, winter plumage, but changing) Robco Lake, SBC (BBC, LCC), first West TN record. Double-crested Cormorant: 16/24 Apr (70/52) LKC, 1/3 May (100/75) Is 13 (WGC). American Bittern: 16 Apr (1) Hwy 79 and Great River Road, LKC (WGC); 16 Apr (1) PEF (VBR, MGW, GRP, JBP); 28 Apr (2) Hooper Marsh, DYC (WGC); 30 Apr/2 May (1/1) ESL (JRW). Least Bittern: 28 Apr (2) Hooper Marsh, DYC (WGC). American White Pelican: 2 May (2) Is 13, LKC (WGC). Black-crowned Night-Heron: 26 Mar (2) Coro Lake, SBC (JRW, DAD). Yellow-crowned Night-Heron: 12 Mar (1) Martin Luther King Park, SBC (JRW). Great Blue Heron (GBH)/Great Egret (GE): Data on heron colonies surveyed by Gerald P. Smith and Truman Stark are provided (see Table 1). Red-breasted Merganser: 30 Apr (5) SFP (JRW); 1 May (6) Is 13 (WGC).

Osprey-Tern: Osprey: 11 Apr (1) SFP (Gary McIntyre). Mississippi Kite: 26 Apr (3) LKC (WGC); 30 Apr (42) SFP (MTOS); 13 May (58) Lower Hatchie NWR, Lauderdale Co. (Joe B. Guinn). Bald Eagle: There were 12 active nests statewide this year. Eight of these had young; however, only 6 nests successfully fledged birds. One nest was destroyed by wind and the second was hit by lightning. Both ad pairs of the destroyed nests were not injured. One pair attempted a second nesting. Six of the adults wore leg bands, but only 2 bands could be read, from which it was determined that both birds had originated from the Tennessee hacking program (Robert Hatcher, Tennessee Wildlife Resources Agency). Sora: 8-30 Apr (1-4) ESL (JRW, MTOS); 28 Apr (2) Hooper Marsh, DYC (WGC); 8 May (4) Hwy 79,

LKC (WGC). Virginia Rail: 20/29 Apr (1/1) ESL (JRW). SANDHILL CRANE: 24 Apr (2) Germantown, SBC (Murray Gardler). Black-bellied Plover: 9 Apr (2) ESL (JRW), early; 11 May (1) ESL (JRW); 3/17 May (4/1) Phillippy Pits (WGC); 15 May (1) Is 13 (WGC). Black-necked Stilt: 19 Mar-EOP (2) ESL (JRW, MTOS). Willet: 2 May (1) Phillippy Pits, LKC (WGC). Ruddy Turnstone: 26 May (15) Phillippy Pits, LKC (WGC). Dunlin: 20/29 Apr (1/3) ESL (JRW); 5 May (4) Hwy 79, LKC (WGC); 23/27 May (1/1) Is 13 (WGC). White-rumped Sandpiper: 9/14 May (2/17) ESL (JRW, DAD); 27 May (10) Is 13 (WGC). Wilson's Phalarope: 9-11 Apr (1 male) ESL (BBC, LCC, JRW). Laughing Gull: 1 May (1, breeding plumage) Is 13 (WGC). Franklin's Gull: 27 Feb-12 Mar (1) ESL (JRW); 27 May (1) Is 13 (WGC). Ring-billed Gull: 26/30 May (3/30) Is 13 (WGC). Herring Gull: 27 May (1) Is 13 (WGC). Forster's Tern: 11/12 Mar (1/2) ESL (JRW); 2 May (56) Is 13, REL and Phillippy (WGC), highest number recorded in west TN; 27 May (1) Is 13 (WGC).

Owl-Finch: Northern Saw-whet Owl: 2 Mar (1) Mud Island, SBC (Knox Martin). Olive-sided Flycatcher: 13 May (1) Coro Lake, SBC (JRW). Alder Flycatcher: 14 May (1) Bartlett, SBC (JRW, Robert Casey). Willow Flycatcher: 14 May (1) Bartlett, SBC (JRW, Robert Casey). Least Flycatcher: 28 Apr (1) PEF (VBR, CHB). Tree Swallow: 12 Mar (1) ESL (JRW); 19 May (9) Hatchie NWR, Haywood Co. (BBC, LCC). Brown Creeper: 25 Apr (1 singing male) Wolf River, N of Rossville, Fayette Co., 26 May (1 singing male) Old Cranetown, REL, LKC; none were found on the South Fork of the Forked Deer River in Madison Co. (RPF). Bewick's Wren: 21 May (1) Munford, Tipton Co. (Dick Preston). House Wren: 1 Apr (1) PEF (VBR, MGW); 29-30 Apr (1) ESL (JRW, DAD). Water Pipit: 20 Apr (4) ESL (JRW); 11 May (1) ESL (JRW), very late. Cedar Waxwing: 30 May (1) Big Sandy Tennessee NWR (BBC, LCC), Breeding Bird Survey stop, same location as 15 June and 3 July 1984. Golden-winged Warbler: 26 Apr (1) SFP (CHB, Sue C. Ferguson, Selma L. Lewis, Noreen M. Smith, VBR); 28 Apr (1) PEF (VBR, CHB). Cerulean Warbler: 30 Apr (30) SFP (MTOS). Swainson's Warbler: 26 Apr (7) found during a float along South Fork Obion River, Trezevant-Skullbone area, Carroll and Gibson Counties; 27 Apr (2) upstream of Christmasville Rd., Carroll Co. (RPF). Mourning Warbler: 19 Apr (1) PEF (VBR); 12 May (1) MEM (Ray Wilson); 12 May (1) US 70/Hatchie River, Haywood Co., and (1) Cypress Grove Park, Madison Co. (BBC, LCC). Rufous-sided Towhee: 1 "spotted" individual present from previous season (13 Nov-21 Apr) Dyersburg (Celia Hudson). Grasshopper Sparrow: 26 Mar-EOP (2-3) ESL (JRW); observed in several additional locations in SBC. Le Conte's Sparrow: 3 Mar (1) PEF (Theresa Irion); 19/26 Mar (1/2) ESL (JRW); 1 Apr (3) PEF (VBR, MGW). Lincoln's Sparrow: 12 Mar (2) ESL (JRW); 23 Apr (1) Decatur Co. (CHB), apparently first report for Decatur Co.; 30 Apr (2) MEM (MTOS); 14 May (6) Bartlett, NW SBC (JRW, Robert Casey). Bobolink: 26 Apr (2 males) LKC (WGC); 30 Apr (6) MEM (BBC, LCC); 3 May (15, all males) LKC (WGC). Rusty Blackbird: 10 Mar (12) REL, Obion Co. (AHH); 30 Apr (1 male) Robco Lake (BBC, LCC). SMITH'S LONGSPUR: 2 Mar-16 Apr (1-22) PEF (JRW, Earnest J. Restivo, m. ob.); 16 Apr (1) ESL (JRW, DAD). Western Meadowlark: 3-11 Mar (3) PEF (JRW); 12 Mar (1) ESL (JRW). House Finch: nesting was reported again for the second year at Tiptonville, Dyersburg and several locations in SBC.

Locations: DYC — Dyer Co.; ESL — Ensley Sewage Lagoons, Shelby Co.; Is 13 — Island 13, Lake Co.; LKC — Lake Co.; MEM — Memphis; PEF — Penal Farm, Memphis, Shelby Co.; REL — Reelfoot Lake, Obion and Lake Co.; SBC — Shelby Co.; SFP — Shelby Forest S.P., Shelby Co.

MARTHA G. WALDRON, 1626 Yorkshire Drive, Memphis, TN 38119.

HIGHLAND RIM AND BASIN REGION — Weather conditions during the period were favorable with temperatures in Nashville being 3.6 degrees above normal in March, 0.3 degrees below normal in April and 2.4 degrees below normal for May. Rainfall was near normal in March and May and 1.7 inches below normal in April.

Large numbers of tent caterpillars and geometer caterpillars were present in the tree foliage throughout much of the season and certainly contributed to this season being one of the best migration seasons in several years. Observers reported high numbers of thrushes, vireos, and warblers from all parts of the region. An early influx of Northern Parulas was observed in late March and early April in the Nashville Area. Several observations of both Connecticut and Mourning Warblers were also reported. Many winter residents, such as White-throated Sparrow and Ruby-crowned Kinglet, were present in the region as late as mid May.

A number of unusual species was reported during the period including a pair of Scissor-tailed Flycatchers in Coffee Co.. Also reported were a Lark Sparrow in Williamson Co., and an American Avocet at Woods Reservoir. A Swainson's Warbler at Barkley Waterfowl Management Area constitutes the first Stewart Co. record for this species.

Loon-Heron: Common Loon: 16 May (1) Wayne Co. (DJS), lrs. Pied-billed Grebe: 29 Apr (1) WDR (DLD), lrs. Double-crested Cormorant: 13 May (20) WDR (MDH), max; 20 May (3) WDR (DLD), lrs. American Bittern: 22 Apr (1) MOP (OBL, ARL), ers; 1-9 May (1) CCNWR (DWB), lrs; 6 individuals reported for season. Least Bittern: 2-3 May (1) BCWMA (DWB), only report. Great Egret: 31 Mar (1) DUC (AHH), ers; 4 Apr (17) BWMA (DWB), max; 24 May (1) PPL, RUC (MLM). Snowy Egret: 25 Apr (1) AEDC (*DLD), only report. Little Blue Heron: 12 Mar (1 ad) CCNWR (*DWB), ers and earliest ever in TN. Green-backed Heron: 15 Apr (2) BWMA (DWB), ers. Yellow-crowned Night-Heron: 30 Apr (3) Metro Center, DVC (CAS), ers.

Goose-Duck: White-fronted Goose: 12 Mar-15 Apr (3) CCNWR (DWB), lrs; 10 individuals reported from 4 locations. Snow Goose: 4 Mar (6) near Bethesda, WMC (Louis Bordenave); 4 Mar (1 snow phase) BWMA (DWB), lrs. Green-winged Teal: 1 Apr (75) BWMA (DWB), max. American Black Duck: 12 Mar (129) SWC (DWB), max. Northern Pintail: 1 Apr (2) BWMA (DWB), lrs. Blue-winged Teal: 10 Mar (3) CCNWR (DWB), ers; 15 Apr (65) SWC (DWB), max. Northern Shoveler: 1 Apr (54) SWC (DWB), max; 25 Apr (2) BWMA (DWB), lrs. Gadwall: 12 Mar (114) SWC (DWB), max; 3 May (2) BWMA (DWB), lrs. American Wigeon: 12 Mar (83) SWC (DWB), max; 9 May-EOP (2) BWMA (DWB), lrs, these 2 birds included 1 healthy female and 1 wounded male that was unable to fly. Canvasback: 9 May (1) BWMA (DWB), lrs. Redhead: 12 Mar (13) CCNWR and BWMA (DWB), max, lrs. Ring-necked Duck: 12 Mar (281) SWC (DWB), max; 15 Apr (1) OHL (CGD), lrs. Lesser Scaup: 12 May (2) RDL (ATT, et al.), lrs. Common Goldeneye: 3 May (1) OHL, DVC (TJW), lrs. Bufflehead: 12 Apr (20)

RDL (ATT), lrs. Hooded Merganser: 9 May (1) BWMA (DWB), lrs. Red-breasted Merganser: 10-18 Mar (5) CCNWR (DWB), max; 29 Apr (1) WDR (RWL), lrs. Ruddy Duck: 18 Mar (2) CCNWR (DWB), lrs.

Osprey-Eagle: Osprey: 4 reports; 10 Apr (1) Monterey Lake, Putnam Co. (DWB); 12 Apr (1) Wartrace Lake, Robertson Co. (Allen W. Hixon, Dorothy B. Hixon); 19 Apr (1) Fernvale, WMC (Dick Bransford); 29 Apr (1) Tims Ford Dam, Franklin Co. (Jose Martinez). Bald Eagle: 5 Apr (1 subadult) Cheatham WMA, CHC (AHH), only report. Northern Harrier: 15 Apr (1) CCNWR (DWB), lrs. Sharp-shinned Hawk: 29 May (1 ad) DeJarnett Lane, RUC (TJW), only report. Rough-legged Hawk: 9 Apr (1 dark phase, 3 light phase) Fort Campbell Military Base, MTC (DWB), max, lrs. Golden Eagle: 1 Mar (1 ad) CCNWR (TJW); 9 Apr (1 ad) Fort Campbell Military Base, MTC (DWB), only 2 reports.

Turkey-Snipe: Wild Turkey: 29 Apr (6) South Harpeth Valley, WMC (ATT); 29 Apr (9) Harpeth Valley, WMC (Richard H. Connors); 29 Apr (1) AEDC (Jose Martinez). Sora: 29 Apr (2) Pardue's Pond, CHC (Maxey H. Irwin); 29 Apr (2) Ashland City, CHC (Robert English), ers. American Coot: 12 Mar (204) SWC (DWB), max; 3 May (1) BWMA (DWB), lrs. Sandhill Crane: a total of 266 cranes passed over Barnes Hollow, Putnam Co., between 1 Mar and 12 Mar (RWS); 1-5 Mar (1) ROB (DJS), continues a winter report; 9 Apr (300) Ovaca Lake, CFC (MDH), max. Lesser Golden-Plover: 12 Mar (2) CCNWR (DWB), ers; 5 Apr (3) AEDC (DLD), lrs. Semipalmated Plover: 15 Apr (19) BWMA (DWB), max, ers. Killdeer: 12 Mar (201) SWC (DWB), max. AMERICAN AVOCET: 22 Apr (7) WDR (*DLD, RWL, Harry C. Yeatman, James R. Peters), only report. Greater Yellowlegs: 12 Mar (3) SWC (DWB), ers; 3 May (16) SWC (DWB), max. Lesser Yellowlegs: 12 Mar (6) BWMA (DWB), ers; 25 May (1) BWMA (DWB), lrs. Solitary Sandpiper: 25 Mar (1) MOP (WNJ, AML), ers; 1 Apr (33) BWMA (DWB), max; 27 May (1) near Belleville, Lincoln Co. (DFV, Joseph McGlaughlin, Robert Brayden), lrs. Spotted Sandpiper: 22 Apr (2) SWC (DWB), ers; 25 May-EOP (1) Metro Center, DVC (DFV), lrs. Upland Sandpiper: 25 Apr (1) AEDC (DLD); 27 Apr (1) CCNWR (DWB), only reports. Semipalmated Sandpiper: 15 Apr (3) CCNWR (DWB), ers; 25 May (2) BWMA (DWB), lrs. Western Sandpiper: 14 May (1) ROB (DJS), lrs. Least Sandpiper: 30 Apr (3) ROB (DJS), ers; 14 May (3) ROB (DJS), lrs. White-rumped Sandpiper: 9 May (1) BWMA (DWB), ers; 25 may (2) BWMA (DWB), lrs. Baird's Sandpiper: 13-15 May (1) ROB (*DJS), only report. Pectoral Sandpiper: 4 Mar (5) CCNWR (DWB), ers; 5 May (9) BWMA (DWB), lrs. Dunlin: 3 May (4) Gallatin Steam Plant, Sumner Co. (TJW, David McCarroll); 9 May (1) CCNWR (DWB), only reports. Stilt Sandpiper: 3 May (2) CCNWR (DWB), only report. Short-billed Dowitcher: 9 May (13) CCNWR (*DWB); 14-15 May (10-28) ROB (DJS), only reports. Common Snipe: 25 Mar (75) MOP (WNJ, AML), max; 9 May (2) BWMA (DWB), lrs.

Gull-Sapsucker: Bonaparte's Gull: 29 Apr (4) OHL (LFK), lrs. Ring-billed Gull: 12 Mar (267) SWC (DWB), max; 9 May (12) CCNWR (DWB), lrs. Caspian Tern: 28 Apr (2) MOP (OBL); 29 Apr (5) OHL (LFK), only reports. Common Tern: 9 May (2) CCNWR (DWB), only report. Forster's Tern: 9 May (6) CCNWR (DWB), only report. Black-billed Cuckoo: 28 Apr (1) Pennington Bend, DVC (MLM), ers; 3 May (1) RDL (TJW, David McCarroll), lrs. Yellow-billed Cuckoo: 29-30 Apr (43) Nashville Area SBC, ers; returned late throughout region. Common Nighthawk: 26 Apr (1) Pennington Bend, DVC (MLM), ers. Chuck-will's-widow: 21 Apr (1)

WSB (DWB), ers. Whip-poor-will: 13 Apr (1) WSB (DWB), ers. Chimney Swift: 29 Mar (1) Clarksville, MTC (AHH), ers. Ruby-throated Hummingbird: 15 Apr (1) Skunk Hollow, DVC (DFV), ers. Yellow-bellied Sapsucker: 15 Apr (1) WSB (DWB), lrs.

Flycatcher-Wren: Eastern Wood-Pewee: 26 Apr (1) BAH (RWS), ers. Acadian Flycatcher: 29 Apr (1) WAP (DFV), ers. Willow Flycatcher: 9 May (1) CCNWR (DWB), ers; 25 May (2) Metro Center, DVC (DFV); 31 May (1) Misery Swamp, MTC (AHH), only reports. Least Flycatcher: 28 Apr (1) Woodland Park, MUC (ARL), ers. Great Crested Flycatcher: 15 Apr (1) Fort Negley, DVC (CGD), ers. Eastern Kingbird: 16 Apr (1) WAP (SDB, RLP), ers. SCISSOR-TAILED FLYCATCHER: 19 Apr (1) Columbia, MUC (Ben G. High); 29 Apr-EOP (2, ph) Seal's Farm, near Capitol Hill, CFC (RWL, *DLD), these birds were reported carrying nest material and performing courtship behavior. Purple Martin: 27 Mar (4) DUC (AHH), ers. Tree Swallow: 12 Mar (2) CCNWR (DWB), ers. Northern Rough-winged Swallow: 25 Mar (2) CCNWR (DWB), ers. Bank Swallow: 3-9 May (1) CCNWR (DWB), ers; 15 May (1) WSB (DWB). Cliff Swallow: 9 May (120) BWMA (DWB). Barn Swallow: 3 Apr (1) DUC (AHH), ers. Red-breasted Nuthatch: 15 Apr (1) CCNWR (DWB), only report. Brown Creeper: 22 Apr (1) WSB, lrs. Bewick's Wren: 4 Apr (2) Brinkley Rd., RUC (TJW, David McCarroll); 29 Apr (2) Dunaway Chapel Rd., RUC (RVM); 1-8 May (1) MTC (DWB); 7-15 May (1) Westvaco property, SWC (DWB). House Wren: 9 Apr (1) MTC (DWB), ers. Winter Wren: 9 Apr (1) Fort Campbell Military Base, SWC (DWB), lrs. Marsh Wren: 29 Apr (2) Ashland City, CHC (Nashville Area SBC), ers.

Kinglet-Vireo: Golden-crowned Kinglet: 15 Apr (4) SWC (DWB), lrs. Ruby-crowned Kinglet: 13 May (1) Craggie Hope, CHC (DFV), lrs. Blue-gray Gnatcatcher: 26 Mar (1) RDL (MLM), ers. Veery: 2 May (1) WSB (DWB), ers. Swainson's Thrush: 15 Apr (1) WSB (DWB), ers; 24 May (1) BAH (RWS), lrs. Hermit Thrush: 25 Apr (1) BAH (RWS), lrs. Wood Thrush: 17 Apr (1) WEM (CRD), ers. Gray Catbird: 29 Apr (1) WEM (CRD). Water Pipit: 22 Apr (1) CCNWR (DWB), lrs. Cedar Waxwing: 12 Mar (184) SWC (DWB), max; 1-12 present through EOP in SWC and MTC (DWB). White-eyed Vireo: 9 Apr (1) CCNWR (DWB), ers. Solitary Vireo: 27 Mar (1) Oaklands, RUC (TJW), new Nashville Area early date; 18 May (1) BCWMA (DWB), lrs. Yellow-throated Vireo: 7 Apr (1) WAP (DFV), ers. Warbling Vireo: 19 Apr (2) RDL (ATT, et al.), ers. Philadelphia Vireo: 22 Apr (1) CCNWR (DWB), ers. Red-eyed Vireo: 18 Apr (1) BAH (RWS), ers.

Warbler-Tanager: Blue-winged Warbler: 9 Apr (1) Giles Co. (Brad Hammond), ers. Golden-winged Warbler: 22 Apr (1) BWMA (DWB), ers; 12 May (1) CFC (MDH), lrs; 5 reports for region. Tennessee Warbler: 22 Apr (4) SWC (DWB), ers; arrived later than usual throughout region; 20 May (1) Franklin, WMC (DFV), lrs. Orange-crowned Warbler: 7 Apr (1) Oaklands, RUC (TJW), ers; 26 Apr (1) AEDC (*DLD), lrs. Nashville Warbler: 9 Apr (1) BWMA (DWB), ers; 11 May (1) BAH (RWS), lrs. Northern Parula: 29 Mar (1) WAP (DFV), new Nashville Area early date. Yellow Warbler: 15 Apr (3) SWC (DWB), ers. Chestnut-sided Warbler: 19 Apr (1) RDL (ATT), ers; 17 May (1) BAH (RWS), lrs. Magnolia Warbler: 25 Apr (1) WSB (DWB), ers; 16 May (1) Clarksville, MTC (ATT), lrs. Cape May Warbler: 28 Apr (1) Columbia, MUC (ARL), ers; 7 May (1) WEM (CRD), lrs. Yellow-rumped Warbler: 15 Apr (62) SWC (DWB), max; 14 May (1) WEM (CRD), lrs. Black-throated

Green Warbler: 2 Apr (1) WAP (SDB, RLP), ers. Blackburnian Warbler: 30 Apr (1) WAP (DFV), ers; 15 May (1) DUC (AHH), lrs. Yellow-throated Warbler: 9 Apr (6) SWC (DWB), ers. Prairie Warbler: 13 Apr (1) BAH (RWS), ers. Palm Warbler: 9 Apr (1) CCNWR (DWB), ers. Bay-breasted Warbler: 26 Apr (1) RDL (Jane C. Maynard), ers. Blackpoll Warbler: 26 Apr (1) WEM (CRD), ers; 11 May (1) BAH (RWS), lrs. Cerulean Warbler: 22 Apr (1) WSB (DWB), ers. Black-and-white Warbler: 3 Apr (1) BAH (RWS), ers. American Redstart: 3 May (4) SWC (DWB), ers and max. Prothonotary Warbler: 9 Apr (1) Giles Co. (Brad Hammond), ers. Worm-eating Warbler: 15 Apr (1) LBL (DWB), ers. SWAINSON'S WARBLER: 9 May (1) BWMA (*DWB), first SWC record. Ovenbird: 18 Apr (1) BAH (RWS), ers. Northern Waterthrush: 12 Apr (1) RDL (ATT, et al.) ers; 9 May (3) BWMA (DWB), lrs. Louisiana Waterthrush: 17 Mar (1) Basin Springs, WMC (KAG), ers. Kentucky Warbler: 15 Apr (1) LBL (DWB), ers. Connecticut Warbler: 4 reports: 26 Apr (1) AEDC (DLD), ers; 4 May (1) Pennington Bend, DVC (MLM); 9 May (1) WSB (*DWB); 19 May (1) BAH (*RWS), lrs. Mourning Warbler: 5 reports: 3 May (1) LBL (*DWB), ers; 10 May (2) RDL (TJW, WJC); 13 May (1) Pond Creek, Lawrence Co. (DJS); 17 May (4) RDL (TJW), max; 20 May (1) BAH (RWS), lrs. Common Yellowthroat: 15 Apr (1) Fort Negley, DVC (CGD), ers. Hooded Warbler: 16 Apr (1) WAP (SDB, RLP), ers. Wilson's Warbler: 10 May (1) RDL (TJW, WJC); 12 May (2) RDL (ATT), only reports. Canada Warbler: 20 May (1) Franklin, WMC (DFV), lrs; Yellow-breasted Chat: 19 Apr (1) RDL (ATT, et al.), ers. Summer Tanager: 14 Apr (1) WSB (DWB), ers. Scarlet Tanager: 15 Apr (2) LBL (DWB), ers.

Grosbeak-Junco: Rose-breasted Grosbeak: 24 Apr (1) BAH (RWS), ers; 17 May (1) BAH (RWS), lrs. Indigo Bunting: 22 Apr (1) Skunk Hollow, DVC (DFV), ers. Dickcissel: 22 Apr (4) Columbia, MUC (ARL, OBL), ers. BACHMAN'S SPARROW: 9 May (1 male) Westvaco Timber Co. land, SWC (*DWB), only report. Chipping Sparrow: 24 Mar (1) Columbia, MUC (OBL), ers. Vesper Sparrow: 12 Mar (2) CCNWR (DWB), ers; 3 May (1) BCWMA (DWB), lrs. LARK SPARROW: 30 Apr (1) WMC (ATT); 7 May (5) Wayne Co. (*DJS). Savannah Sparrow: 3 May (3) BWMA (DWB), lrs. Grasshopper Sparrow: 9 May (3) SWC (DWB). Fox Sparrow: 18 Apr (1) BAH (*RWS), lrs. Lincoln's Sparrow: 9 Apr (1) CCNWR (DWB), ers; 12 May (1) Franklin, WMC (DFV), lrs. Swamp Sparrow: 15 Apr (162) SWC (DWB), max; 22 May (1) BWMA (DWB), lrs. White-throated Sparrow: 20 May (1) Franklin, WMC (DFV), lrs; several reports of birds lingering into mid May. White-crowned Sparrow: 12 May (1) Skunk Hollow, DVC (DFV), lrs. Dark-eyed Junco: 15 Apr, recorded at 3 locations on this date: (1) BAH (RWS), (23) SWC (DWB), (1) Fort Negley, DVC (CGD, et al.), lrs.

Bobolink-Siskin: Bobolink: 22 Apr (8) CCNWR (DWB), ers; 3 May (116) CCNWR (DWB), max; 22 May (3) CCNWR (DWB), lrs. Orchard Oriole: 15 Apr (3) WSB (DWB), ers. Northern Oriole: 22 Apr (1) WSB (DWB), ers. Purple Finch: 13 May (2) Dover, SWC (DWB), lrs. RED CROSSBILL: 9 Apr (11) Fort Campbell Military Base, MTC (*DWB). Pine Siskin: 15 Apr (4) SWC (DWB).

Locations: AEDC — Arnold Engineering Development Center, Coffee Co.; CCNWR — Cross Creeks NWR, Stewart Co.; CFC — Coffee Co.; BAH — Barnes Hollow, Putnam Co.; BCWMA — Bear Creek Waterfowl Management Area, Stewart Co.; BWMA — Barkley WMA, Stewart Co.; CHC — Cheatham Co.; DUC

— Dunbar Cave S.P., Montgomery Co.; DVC — Davidson Co.; LBL — Land-Between-the-Lakes, Stewart Co.; MOP — Monsanto Ponds, Maury Co.; MUC — Maury Co.; MTC — Montgomery Co.; OHL — Old Hickory Lake; RDL — Radnor Lake State Natural Area, Davidson Co.; ROB — Robertson Pond, Lawrence Co.; RUC — Rutherford Co.; SWC — Stewart Co.; WAP — Warner Parks, Davidson Co.; WDR — Woods Reservoir, Franklin Co.; WEM — West Meade, Davidson Co.; WMC — Williamson Co.; WSB — Wiley's Springs Bay, Stewart Co.

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EASTERN RIDGE AND VALLEY REGION — After a mild winter, the region experienced a cool, wet spring. March was considerably warmer than usual, early April was cold, late April was near normal, early May was record cold, and late May was slightly cooler than normal. Rainfall at all three major reporting stations (Chattanooga, Knoxville, and Johnson City) was slightly below average in March and April, but enough above average in May to nearly even out the season. "Thus it was the wettest spring in several years." As a result, area lakes came up early and most reached their highest levels since the early 1980s (i.e., before the drought years). A light snowfall on 7 May was the latest on record at Tri-Cities Regional Airport.

The early warmth apparently encouraged some birds to move northward much earlier than normal. In the Johnson City area, 3 shorebirds, Forster's Tern, Chimney Swift, and Bank Swallow were record early. Most other species "arrived pretty much on schedule." A few wintering species lingered later than usual. The rains and high water levels covered some shorebird habitat (lake shores) while creating some more (flooded fields), destroyed some shoreline nests of Canada Geese, and "may also have delayed the breeding of some aerial foragers, such as martins." Stalled low pressure north of the region on 10-12 May grounded many migrants, mainly water birds, in the Johnson City area — a Ruff and other shorebirds, 4 species of terns, and some late ducks, among others. The warbler migration was good in the Knoxville area, but only fair in the Johnson City area. Northern finches were virtually absent. Notable rarities, besides the Ruff, included Glossy Ibis, 3 lingering *Selasphorus* hummingbirds, Scissor-tailed Flycatcher, and Le Conte's Sparrow.

Loon-Ibis: Common Loon: 9 Apr (52) WBL (CPN, Richard Clark), max; 22 May (1) HRA (Gene S. Van Horn), lrs. Horned Grebe: 4 Mar (23) CHL (KHD, LHD), max. Double-crested Cormorant: 9 Apr (8) WBL (CPN, Richard Clark); 18 Apr (1) AUS (RLK); 22 Apr (2) CHL (C. Del Blum); 30 Apr (7) Fort Loudoun Lake, KNC and Loudon Co. (CPN, James T. Tanner); 11-19 May (1-3) AUS (RLK, BLC); 13 May (1) HRA (C. Richard Hughes). American Bittern: 1 Apr (1) CHA (RJH), only report. Least Bittern: 15 May (1, heard calling) AUS (BLC), rare in spring. Great Egret: 4-6 Apr (2) SAB (KHD, LHD); 10 Apr (2) Cherokee Lake, Grainger Co. (David C. Chaffin); 15 Apr (4) LST (BLC); 22 Apr (3) Rankin's Bottoms, Cocke Co. (JAK); 24 Apr/6 May (2/1) HLC (RJH); 24-25 May (1-2) CHA (Elena S. Killian). Cattle Egret: 25 May (15) CHA (Randy C. Stringer). Black-crowned Night-Heron: 15 May (2) AUS (RLK). GLOSSY IBIS: 26 May (1, breeding plumage) LST (BLC, Glenn W. Swofford, Sally Goodin, CFW), 2nd JNC area record.

Waterfowl: Tundra Swan: 4 Mar (1) HRA (KHD, LHD). Snow Goose: 1 Mar (6 white, 3 blue/5 white, 2 blue) HRA/WBL (Tennessee Wildlife Resources Agency). Canada Goose: high water flooded several nests in the JNC area (fide RLK).

Blue-winged Teal: 16 May (1) AUS (RLK), lrs. American Wigeon: 8 May (1/4) EBF/AUS (CPN/RLK), lrs. Redhead: 13 Mar (70) BOL (RLK, BLC), max. Surf Scoter: 22 Apr (8) CHL (C. Del Blum). White-winged Scoter: 9 Mar/11 May (2/2) BOL (BLC), latter was latest spring record for Tennessee. Bufflehead: 11 May (2) AUS (RLK), lrs. Common Merganser: 12 Mar (2) CHL (AMJ), only report. Red-breasted Merganser: 30 Mar (53) Cherokee Lake, Grainger Co. (David C. Chaffin), max; 29 Apr (1) AUS (RLK), lrs. Ruddy Duck: 11 May (1) AUS (RLK), lrs, latest JNC area record by 17 days.

Osprey-Crane: Osprey: 2 Mar (1) Tellico Lake, MOC (WKJ), ers; pair returned to Holston Army Ammunition Plant, Hawkins Co. nest site (fide FJA). Sharp-shinned Hawk: 20 May (female incubating) near Englewood, McMinn Co. (Paul G. Mascuch). Cooper's Hawk: incubating bird flushed from nest in Apr near Amnicola Marsh, HLC (James D. Rowell, Jr.). Red-shouldered Hawk: 2 nests in Norris, Anderson Co., area (CPN); 2 nests and an additional pair in KNC, where traditionally considered a rare nester (David Hankins, J. B. Owen). Virginia Rail: 5-15 Apr (1) AUS (BLC). Sora: 21 Mar (1) TCA (BLC); 1-21 Apr (1) AUS (BLC, RLK); 12 Apr (1) LST (RLK). Common Moorhen: 27-29 May (1) Brainerd Levee, CHA (Jonnie Sue Lyons, Paul C. Harris, et al.). Sandhill Crane: besides 25-34 wintering birds at HRA, the spring flight in the CHA area ran 7 Feb-26 Mar (3600+, some duplication likely), max 10 Mar (900+ flying over in 6 hours) Prentice Cooper State Forest, Marion Co. (James C. Brown); a color-banded bird seen 26 Feb at SAB had been banded 26 Sep 1987 at Dayton, Ontario (all fide KHD).

Shorebirds: Semipalmated Plover: 16 May (11) EBF (CPN), max. Greater Yellowlegs: 29 APR (31) KSP (KHD, LHD), max. Lesser Yellowlegs: 4 Mar (1) SAB (KHD, LHD), ers; 8 May (35) AUS (RLK), max. Solitary Sandpiper: 29 Mar (1) AUS (RLK, BLC), ers; 3 Jun (1) Tellico Wildlife Refuge, MOC (JAK), lrs, late. Willet: 5 May (4) AUS (BLC, RLK); 9 May (2) TCA (BLC); 8th & 9th JNC area records. Semipalmated Sandpiper: 18 May (1) WGC (RLK), only JNC area record. Western Sandpiper: 14 May (1) AUS (BLC); 20 May (5) KSP (Johnny T. Parks); scarce in spring. Least Sandpiper: 10 Mar (1) AUS (BLC, Glenn W. Swofford), ers, earliest JNC area record by 23 days; 8 May (28) Sullivan Co. (BLC), max. White-rumped Sandpiper: 20 May (1) KSP (Johnny T. Parks). Pectoral Sandpiper: 6 Mar (1) AUS (BLC), ers, earliest JNC area record by 4 days; overall low numbers in JNC area (fide RLK). Dunlin: 29 Apr (5) KSP (KHD, LHD); 11 May (1) AUS (GOW, RLK). Stilt Sandpiper: 17 Apr (1) EBF (CPN). RUFF: 10-13 May (1 female) AUS (*RLK, then m. ob.), first JNC area record, about 4th state record, details to be published. Dowitcher, sp.: 10-13 Mar (4, winter plumage) AUS (RLK), earliest JNC area record by 25 days and earliest ever in Tennessee for either species. Short-billed Dowitcher: 15 May (22, breeding plumage) AUS (BLC), highest count ever in JNC area; only report. American Woodcock: 2-7 Mar (1) SAB (KHD); 11 Mar (6) Amnicola Marsh, HLC (RJH); 15 Mar-29 Apr (1-2) AUS (RLK, BLC, JWB); nest in Mar near Maryville, Blount Co. (JAK); brood in late Apr near Tellico Lake, MOC (WKJ).

Gull-Hummingbird: Bonaparte's Gull: 4 Mar (1300) CHL (KHD, LHD), max, very large number for region (see winter 1988/89 report); 4 Apr (41) BOL (BLC); 29 Apr (3) KSP (KHD, LHD), lrs. Herring Gull: 11 May (1) BOL (RLK), lrs. Caspian Tern: 15 Apr (2) Nickajack Lake, Marion Co. (RJH); 17 Apr (1) AUS (BLC); 29 Apr (4) KSP (KHD, LHD); 11 May (1) BOL (RLK); above average

spring showing. Common Tern: 11 May (1) BOL (BLC, RLK). Forster's Tern: 4 Apr (1) BOL (RLK), earliest JNC area record by 8 days; 17 Apr (1) EBF (CPN); 19 Apr (2) SAB (KHD, LHD); 22 Apr (1) Jefferson Co. (JAK); 29 Apr/5 May/15 May (1/5/1) AUS (RLK, BLC); 11 May (10) BOL (BLC, RLK); good showing. Black Tern: 10-24 May (2-4) AUS (RLK, BLC), only report. Black-billed Cuckoo: 24 Apr (2) HLC (RJH); 9 May (2) TCA (BLC); 14 May (1) KNC (ARH, RDH, Gay Morton); 16 May (1) KNX (Bettie Mason). Common Barn-Owl: 2 active sites in JNC (RLK). Chimney Swift: 10 Mar (1) JNC (Richard Lura), ers, earliest JNC area record by 13 days. *SELASPHORUS*, sp.: wintering bird at KNX last seen in late Mar (fide J. B. Owen); 2 wintering birds in CHA area last seen 14 & 18 Apr, respectively, the former having molted into the ad male plumage of RUFOUS HUMMINGBIRD (fide KHD).

Flycatcher-Vireo: Willow Flycatcher: 8 May (1) AUS (RLK), ers. SCISSOR-TAILED FLYCATCHER: 23 Apr (1) near Norris Lake, Campbell Co. (George W. McKinney), rare in region. Bank Swallow: 31 Mar (1) AUS (BLC), ers, earliest JNC area record by 6 days; 11 May (30) AUS (RLK), max. Cliff Swallow: 21 Mar (1) HLC (RJH), ers. Common Raven: 11 Apr (1) St. John's Pond, WGC (RLK), low elevation. Red-breasted Nuthatch: no reports. Brown-headed Nuthatch: 11 Mar (1) HRA, Bradley Co. (LHD). Marsh Wren: 5 May (1) AUS (BLC); 7 May (1) CHA (RJH). Ruby-crowned Kinglet: 12 May (1) JNC (RLK), lrs, latest JNC area record by 4 days. Swainson's Thrush: fairly common in KNX area, 67 on KNC SBC on 30 Apr (fide CPN). Cedar Waxwing: 7 Mar (500) HLC (Jonnie Sue Lyons), max; above average numbers at EOP in KNX area (fide CPN); average numbers at JNC (fide RLK). Loggerhead Shrike: only found at 2 sites in JNC area (RLK). Warbling Vireo: 16 May (3) KNX (Bettie Mason), rare there.

Warbler-Grosbeak: Orange-crowned Warbler: 23 Apr (1) Morgan Co. (James M. Campbell), only report. Mourning Warbler: 12 May (1) JNC (RLK, et al.). Wilson's Warbler: 12 May (1) JNC (RLK, et al.), scarce in spring. Summer Tanager: 14 May (1) JNC (RLK), only report there. Dickcissel: 7 Apr (5) CHA (AMJ). Vesper Sparrow: 15 Mar/21 Apr (2/1) AUS (RLK/BLC); 19 Mar (3) SAB (KHD, LHD); 4 Apr (1) BOL (RLK); 7 Apr (20) CHA (AMJ, RJH). Savannah Sparrow: 13 May (1) AUS (RLK), lrs. Grasshopper Sparrow: 17 Apr (1) LST (JWB), ers. LE CONTE'S SPARROW: 7 Apr (1) CHA (AMJ), rare in region. Lincoln's Sparrow: 9 May (1) TCA (BLC); 12 May (1) JNC (RLK); 17 May (1) Claiborne Co. (RDH), seldom seen in spring in region. Swamp Sparrow: 15 May (1) AUS (RLK), lrs. White-crowned Sparrow: 31 May (1) LST (BLC), lrs, latest JNC area record by 1 day. Bobolink: 29 Apr (3) WGC (RLK, BLC), ers; 1 May (100) CHA (RJH), max; 6 May (50) WGC (Barney Keffer); 8 May (17) Greene Co. (Dan Nieves). Rusty Blackbird: 12 Apr (20) LST (RLK), lrs. Purple Finch: very few reports; 18 Apr (4) JNC (RLK), lrs. Pine Siskin: very scarce; 8 Apr (1) Newport, Cocke Co. (ARH, RDH), lrs; none in JNC area. Evening Grosbeak: no reports.

Locations: AUS — Austin Springs, Washington Co.; BOL — Boone Lake, Sullivan & Washington Cos.; CHA — Chattanooga; CHL — Chickamauga Lake, Hamilton Co.; EBF — Eagle Bend Fish Hatchery, Anderson Co.; HLC — Hamilton Co.; HRA — Hiwassee River Area, primarily Meigs Co., but also Bradley, McMinn, & Rhea Cos.; JNC — Johnson City; KNC — Knox Co.; KNX — Knoxville; KSP — Kingston Steam Plant, Roane Co.; LST — Limestone,

Washington Co.; MOC — Monroe Co.; SAB — Savannah Bay, Hamilton Co.; TCA — Tri-Cities Airport, Sullivan Co.; WBL — Watts Bar Lake, Meigs, Rhea, & Roane Cos.; WGC — Washington Co.

RICHARD L. KNIGHT, 804 North Hills Drive, Johnson City, TN 37604.

EASTERN MOUNTAIN REGION — Precipitation for the period was slightly above normal with some unusually late snow storms. Some mountain areas received 6-8 inches of snow the first week of April. Roan Mountain had 2 inches of snow on 2 May and snow flurries were reported in the region as late as 7 May. A hard freeze on 8 May stunted spring growth, causing some forest habitats to be 2-3 weeks late in reaching full canopy density.

Waterfowl numbers were very low this spring and northern finches were almost nonexistent. There were very few Purple Finches and there were no reports of crossbills, siskins or Evening Grosbeaks.

Loon-Duck: Common Loon: 1 Apr (5) SHL (RPL); 29 Apr (2) WTL (JM). Great Egret: 15 Apr (1) WTR (GOW). SNOWY EGRET: 15 Apr (1) WTR (GOW). Yellow-crowned Night-Heron: 29 Mar (3 ad) Elizabethton (RLK); only report at usual nest site. Green-winged Teal: 12 Mar (4) WTR (RLK); 10 Apr (2) WTR (CFW). American Black Duck: no reports from usual WTL-WTR sites (LHTOS). American Wigeon: 8-15 Apr (6-7) WTR (GOW, CFW). Ring-necked Duck: 12 Mar (1) RSL (RLK); 15 Mar (4) Bristol, SLC (RPL); 8-15 Apr (1-2) WTR (GOW, CFW); only reports, low. GREATER SCAUP: 29 Mar (1) WTR (RLK); 10 Apr (2) WTR (CFW). Lesser Scaup: 12 Mar (1) RSL (RLK), only report, low. Bufflehead: 16 Apr (4) Middlebrook Lake, SLC (RPL), lrs. Hooded Merganser: 12 Mar (1) RSL, (2) WTR (RLK). Red-breasted Merganser: 1 Apr (1) Middlebrook Lake, SLC (RPL); 29 Apr (5) SHL (RPL). Ruddy Duck: 13 Apr (1) BVGC (FJA).

Hawk-Vireo: Red-shouldered Hawk: 27 Apr (1) Buffalo Mountain, Washington Co. (BLC), only report. Broad-winged Hawk: 25 Mar (1) PNM (BLC), ers. Forster's Tern: 18 Apr (1) WTL (JWB). Common Barn-Owl: 30 May (1) SHL (RPL). LONG-EARED OWL: 6 May (2) Rich Mountain Rd., Cades Cove, Great Smoky Mountains National Park (JRW, DAD). Chuck-will's-widow: 18 Apr (1) MILC (FJA), ers. Whip-poor-will: 17 Apr (1) MILC (FJA), ers. Olive-sided Flycatcher: 29 Apr (1) HCV (RLK, BLC, Linda Campbell). Purple Martin: 16 Mar (2) WTR (RLK), ers. Cliff Swallow: 29 Apr-EOP (40-50) SR 44 bridge, South Holston River, SLC (RPL), approx. 20 active nests. Barn Swallow: 15 Mar (1) Bristol, SLC (RPL), ers. Common Raven: 16 Mar (1) WIL (RLK); 25 Mar (1) PNM (RLK); 18 Apr (1), 29 Apr (3) HCV (RLK), low elevation (670 m). Red-breasted Nuthatch: few reports; 14 Mar (2) Buffalo Mountain, Washington Co. (RLK); 25 Mar (3) PNM (RLK); 13 Apr (2) BVGC (FJA). Wood Thrush: 20 Apr (1) MILC (FJA), ers. White-eyed Vireo: 18 Apr (1) WTR (JWB), ers. Solitary Vireo: 25 Mar (3) PNM (RLK), ers. Yellow-throated Vireo: 18 Apr (1) HCV (RLK), ers. Warbling Vireo: 19 Apr (1) South Holston River, SLC (Ed Schell), ers.

Warbler-Finch: Golden-winged Warbler: 6 May (2) RNM (RDL, et al.), ers. Northern Parula: 18 Apr (1) HCV (RLK), ers. Magnolia Warbler: 6 May (1) RNM (RDL), ers. Cape May Warbler: 25 Apr (1) MILC (GOW), ers. Black-throated Green Warbler: 6 Apr (1) HCV (RLK), ers. Blackburnian Warbler: 29 Apr (1) HCV (RLK), only report. Yellow-throated Warbler: 29 Mar (1) WIL (RLK), ers. Pine

Warbler: 16 Mar (1) WIL (RLK), ers. Cerulean Warbler: 29 Apr (1) WIL (GOW, RDL), only report. Black-and-white Warbler: 6 Apr (1) HCV (RLK), ers. American Redstart: 20 Apr (1) BVGC (FJA), ers. Louisiana Waterthrush: 25 Mar (1) Hampton, Carter Co. (RLK), ers. Kentucky Warbler: 20 Apr (1) BVGC (FJA), ers. Canada Warbler: 29 Apr (1) WIL (GOW, RDL), ers. White-throated Sparrow: 12 May (1) RNM (RLK et al.), lrs. Rusty Blackbird: 20 Apr (4) Erwin, Unicoi Co. (FJA), only report. Northern Oriole: 24 Apr (1) Elizabethton (GOW), ers. Purple Finch: extremely low; only 4 reports submitted — each of about 3-4 birds.

Locations: BVGC — Buffalo Valley Golf Course, Unicoi Co.; HCV — Hoss Cove, Washington Co.; MILC — Milligan College, Carter Co.; PNM — Pond Mountain, Carter Co.; RNM — Roan Mountain, Carter Co.; RSL — Ripshin Lake, Carter Co.; SHL — South Holston Lake area, Sullivan Co.; SLC — Sullivan Co.; WIL — Wilbur Lake, Carter Co.; WTL — Watauga Lake; WTR — Watauga River, Carter Co.

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ISSN 0026-3575

THE MIGRANT

A QUARTERLY JOURNAL DEVOTED TO TENNESSEE BIRDS

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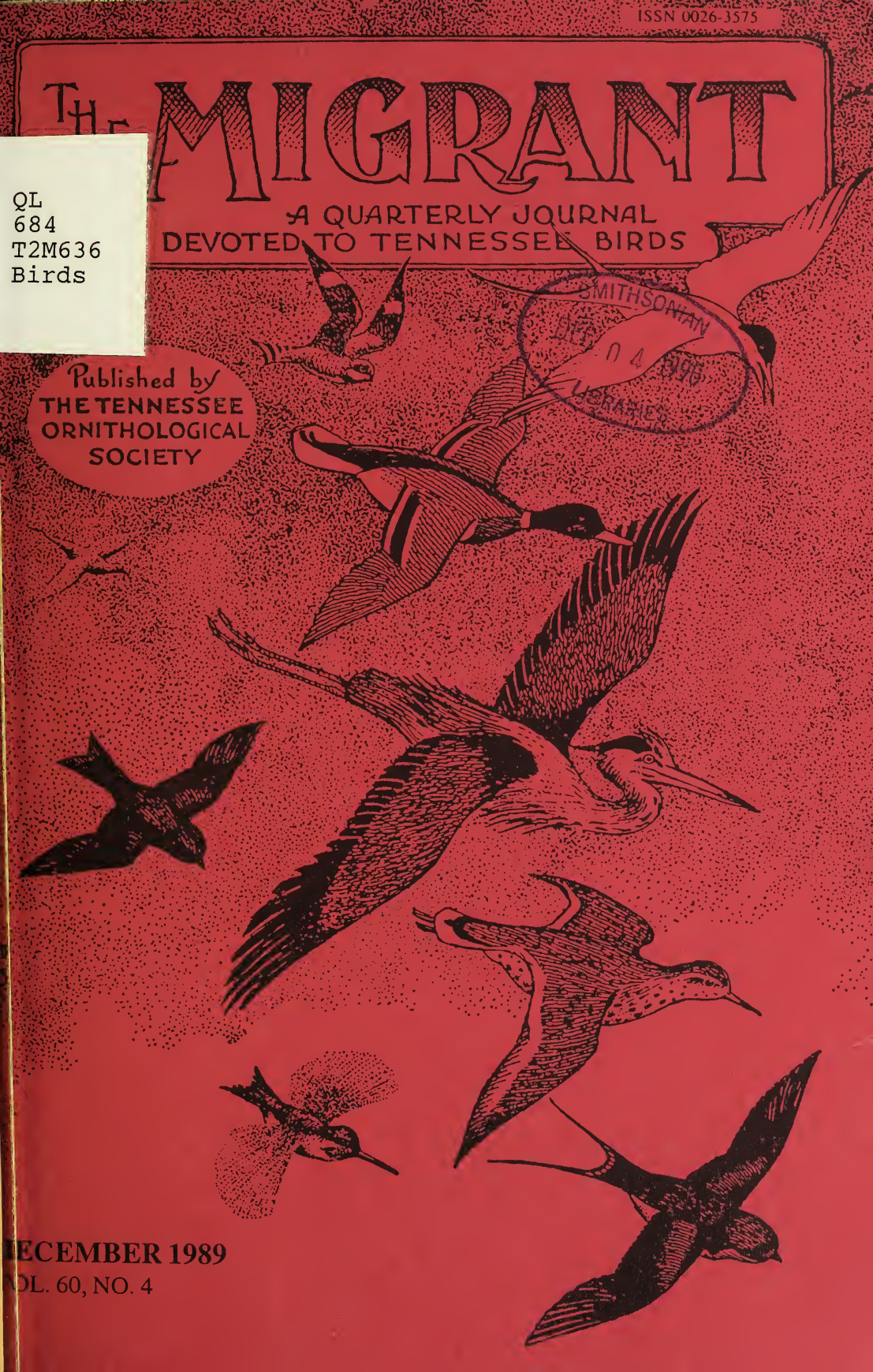

ECEMBER 1989
OL. 60, NO. 4

THE MIGRANT

A QUARTERLY JOURNAL OF ORNITHOLOGY

FIRST ISSUE PUBLISHED IN JUNE 1930

PUBLISHED BY

THE TENNESSEE ORNITHOLOGICAL SOCIETY

Founded at Nashville, Tennessee on 7 October 1915
The T.O.S. is a non-profit, educational, scientific,
and conservation organization.

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Published quarterly (March, June, September, and December).
Printed by Tennessee Industrial Printing Services, Inc., 51 Miller Ave., Jackson, TN 38305.

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THE MIGRANT

Published by the Tennessee Ornithological Society,
to Record and Encourage the Study of Birds in Tennessee.
Issued in March, June, September, and December

VOL. 60 DECEMBER 1989 NO. 4

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The Migrant, 60(4):93-94, 1989

ANOTHER 19TH CENTURY COMMON MERGANSER EGG SET COLLECTED IN TENNESSEE

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Kiff (1989) described five sets of Common Merganser (*Mergus merganser*) eggs collected in Smith County, Tennessee, from 1897-1899. These sets, consisting of 7-9 eggs each, were taken from tree cavities 2.2-5.5 m high during late April or early May. Three sets are still extant, while the other two are known from data cards. These old records represent the only known breeding evidence of this species from Tennessee and are among the few southern records (detailed in Kiff 1989). Currently, the Common Merganser is an uncommon migrant and winter visitor statewide (Bierly 1980).

Recently, another nineteenth century Common Merganser egg set from Tennessee was brought to my attention. In describing a newly acquired egg collection, Cook (1985) mentioned a Short-eared Owl (*Asio flammeus*) egg set from Tennessee. Upon inquiry, Cook (pers. comm.) informed me that the owl record was actually from Pennsylvania, but that a Common Merganser egg set from Tennessee was in the collection. The original label from the collection states that a clutch of seven fresh eggs of American (= Common) Merganser were taken from a "nest in a hollow tree about [4 m] up" in Smith County, Tennessee on 13 May 1896 by Jonathan Minchen. Still in excellent condition, the eggs are cream colored and long elliptical in shape, while "one of them measures 66x44 mm" (Cook pers. comm.). This description of the eggs fits Common Merganser and differs considerably from that of Wood Duck (*Aix sponsa*) and Hooded Merganser (*Lophodytes cucullatus*) (Harrison 1975), Tennessee's other cavity nesting ducks. Formerly part of the oological collection of Albert H. Frost of New York City, this egg set (#C185) is now housed at Columbia-Greene Community College, Hudson, New York (Cook, 1985, pers. comm.).

It is interesting to note that all six known Tennessee records are from a four-year period from the same county, but that three different collectors were involved. Precise locations were not given, but one nest tree was "on the bank of a river" (Kiff 1989), which is typical merganser nesting habitat. The Cumberland and Caney Fork Rivers are the major waterways in Smith County. Did these breeding records indicate a small relict population or maybe just a couple of extralimital pairs? We may never know. But, since these old records only recently were

"discovered," perhaps there are more sets in other egg collections scattered across the country which could fill in some of the gaps.

I thank William E. Cook for his assistance in bringing this record to light.

LITERATURE CITED

BIERLY, M.L. 1980. Bird finding in Tennessee. M.L. Bierly, Nashville.

COOK, W.E. 1985. Large 19th century egg and nest collection recently discovered. *Kingbird* 35:247-250.

HARRISON, H.H. 1975. A field guide to birds' nests. Houghton Mifflin, Boston.

KIFF, L.F. 1989. Historical breeding records of the Common Merganser in the southeastern United States. *Wilson Bull.* 101:141-143.

Accepted 1 August 1989.

The Migrant, 60(4):94-95, 1989

AUTUMN HAWK COUNTS —1988

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Hawkwatchers reported a total of 3,922 birds from 128.9 hours of observations in 1988. Sixty hours of the observations (with 2,657 hawks) were made at Cloudland Canyon State Park; this site is on the top and west side of Lookout Mountain, Dade County, Georgia (35° 1 50′ 09″ N, 85° 28′ 47″ W, Durham, GA 7.5 Quad USGS). While some observations have been made from this location in the past, this is the first time for systematic observations. If the observations from this site are excluded from the totals, only 68.9 hours of observations and 1,265 birds were reported from Tennessee. The results are presented in Table 1. As usual, the huge majority of the sightings (>96%) were of Broad-winged Hawks (*Buteo platypterus*); the highest count was on 21 September which is the normal time for the migration of this species to peak in our area.

Please see page 96 of this issue for comments about the possible cessation of publication of autumn hawk count data in ***The Migrant***.

Table 1. Autumn hawk counts —1988.

Date	Location	Reporter (no. observers)	Hours	TV	SS	CH	UA	RT	RS	BW	UB	NH	OS	AK	OTH	Total
Sept 5	Signal Point	J. Patton (1)	5.0	—	—	1	—	—	—	1	1	—	—	—	—	3
Sept 10	Signal Point	J. Patton (1)	2.0	—	1	—	—	—	—	—	—	—	—	—	—	1
Sept 14	Cloudland Canyon	J. Rowell (1)	7.5	—	3	—	—	3	1	107	—	—	1	—	—	115
Sept 15	Cloudland Canyon	J. Rowell (1)	7.5	—	2	—	—	4	1	23	—	1	1	1	—	33
Sept 17	Ooltewah F.T.	L. Dubke (2)	5.8	4	—	1	—	2	2	164	—	—	—	—	—	173
Sept 18	Cloudland Canyon	J. Rowell (1)	3.0	—	—	—	—	1	—	91	—	—	1	1	—	94
Sept 18	Johnson City	R. Knight (1)	1.5	—	—	—	—	—	—	269	—	—	—	—	1 PF	270
Sept 18	Signal Point	J. Patton (1)	5.2	—	3	1	—	—	—	17	1	—	—	—	—	22
Sept 19	Cloudland Canyon	J. Rowell (1)	8.0	—	1	1	—	1	—	232	—	—	2	—	—	237
Sept 20	Cloudland Canyon	J. Rowell (1)	9.0	—	4	—	—	2	—	413	—	—	2	—	—	421
Sept 20	Signal Point	J. Patton (2)	4.0	—	5	—	—	—	—	407	—	—	—	—	1 BE	413
Sept 21	Cloudland Canyon	J. Rowell (2)	9.0	—	21	—	—	2	—	1653	—	1	2	—	—	1679
Sept 21	Signal Point	J. Patton (1)	3.2	—	—	—	—	—	—	4	—	—	—	—	—	4
Sept 22	Cloudland Canyon	J. Rowell (1)	8.0	—	3	2	—	1	—	56	—	—	—	—	—	62
Sept 22	Look Rock	A. Hoff (1)	4.5	—	2	—	—	—	1	127	5	—	—	—	—	135
Sept 23	Cloudland Canyon	J. Rowell (4)	8.0	—	2	—	—	2	—	12	—	—	—	—	—	16
Sept 24	Audubon Mt.	L. Dubke (8)	2.5	3	—	1	—	3	—	52	—	—	—	—	—	59
Sept 24	Look Rock	A. Hoff (1)	4.0	—	4	1	1	—	—	26	4	—	1	2	1 UR	40
Sept 24	Signal Point	J. Patton (2)	6.7	—	9	—	—	—	—	26	—	—	—	1	1 PF	37
Sept 25	Signal Point	J. Patton (1)	8.0	—	3	1	—	—	—	80	—	—	—	—	—	84
Sept 29	Look Rock	A. Hoff (2)	2.0	—	—	—	—	—	—	—	—	—	—	—	1PF;1BE	2
Oct 1	Signal Point	J. Patton (2)	8.0	—	1	—	—	—	—	4	—	—	—	1	—	6
Oct 2	Signal Point	J. Patton (2)	6.5	—	5	—	—	—	—	11	—	—	—	—	—	16
TOTALS			128.9	7	69	9	1	21	5	3,775	11	2	10	6	6	3,922

Key to species abbreviations in tables: TV—Turkey Vulture; SS—Sharp-shinned Hawk; CH—Cooper's Hawk; UA—Unidentified accipiter; RT—Red-tailed Hawk; RS—Red-shouldered Hawk; BW—Broad-winged Hawk; UB—unidentified buteo; NH—Northern Harrier; OS—Osprey; AK—American Kestrel; OTH—other raptors; PF—Peregrine Falcon; BE—Bald Eagle; UR—unidentified raptor.

The Migrant, 60(4):96, 1989

EDITOR'S NOTE

T. David Pitts

The autumn hawk migration data reported in this issue may be the last to appear in ***The Migrant***. The number of Tennessee observers submitting reports and the number of hours of observations reported from Tennessee have both declined drastically. A possible reason for these declines may be the availability of other, and perhaps more appropriate, data compilation and reporting services, such as the Hawk Migration Association of North America (HMANA) newsletters. Many of the earlier hawk migration reports in ***The Migrant*** contained data from adjacent states, although this was not always clearly pointed out. Past editors and compilers differed in the way out of state reports were handled; the report in this issue contains data from Georgia. HMANA compiles data from a large area and is, therefore, able to present a more realistic picture of hawk migration which is truly an international event.

Currently the position of hawk count compiler for ***The Migrant*** is open; no one has volunteered or suggested a candidate for the position. Unless there is a resurgence of interest in publishing hawk migration data in ***The Migrant*** the hawk count report will be discontinued. Hawk watching is fun (at least on the days with good flights) and always worthwhile (even negative reports are of value); however, like all other TOS activities, participation is voluntary and other birding activities may be more attractive. I suggest that hawk watchers continue to observe from Tennessee sites with the results going to one or more of the organizations (such as HMANA, P.O. Box 3482, Rivermont Station, Lynchburg, VA 24503) that compile such data. Unusual sightings or numbers could also serve as the basis for short notes in ***The Migrant***. Most importantly, data on hawk migration in Tennessee should continue to be gathered and made available to current and future researchers so that these birds can be better understood and conserved.

Readers of the inside front cover will note two changes in the editorial staff; John Robinson (Season Editor) has been replaced by Bob Ford, and Damien Simbeck (State Count Compiler) has been replaced by Susan McWhirter. The work of both John and Damien is gratefully acknowledged.

The Migrant, 60(4):96-97, 1989

AMERICAN AVOCETS IN FRANKLIN COUNTY, TENNESSEE

Don Davidson
1703 Second Ave., Manchester, TN 37355

On 22 April 1989 while driving around Woods Reservoir (Franklin County) I spotted a group of seven American Avocets (*Recurvirostra americana*). Observations were made in bright sunlight with 10-40x binoculars and a 15-60x spotting scope at an initial distance of 75-100 m and later at 25 m. The avocets' size (by direct comparison with adjacent Ring-billed Gulls (*Larus delawarensis*)), white body, black wings with white stripes, and long, slender recurved bill made identification easy. All seven birds were in breeding plumage with reddish-tan neck

and heads. The flock was first seen in deep water; after being disturbed by the busy water traffic from an adjacent boat dock, they flew in tight formation to a small strip of sand beach. Here the long dark legs, white eye rings, and white around the base of the bill could be seen. Ruth Luckado joined me in observing the birds; Harry Yeatman and Jim Peters observed the birds in the afternoon of the same day. The avocets could not be found the next day.

Avocets are only occasional migrants in middle Tennessee (Vogt, D.F., et al., 1985. Birds of the Nashville area (fourth ed.). Nashville Chapter TOS); spring observations are less frequent in Tennessee than fall observations. The observed behavior of sitting on deep water may have been induced by the lack of beach-like areas around Woods Reservoir, the large number of people present, and the heavy boat traffic in the area. To my knowledge this is the first sighting of avocets on Woods Reservoir. A fall sighting in nearby Tims Ford Reservoir was documented by Harry Yeatman (*Migrant* 46:60-61, 1975).

Accepted 9 June 1989.

The Migrant, 60(4):97-100 , 1989

MINUTES OF THE FALL 1989 TOS BOARD OF DIRECTORS MEETING AND SYMPOSIUM

The Board of Directors Meeting was held at the Ramada Inn, Crossville, on October 14, 1989, with 28 directors in person and one represented by proxy. President Barbara Finney called the meeting to order at 4:00 p.m. and copies of the minutes of the 1989 spring meeting were distributed. Fred Carney corrected the name of Rick Taylor in the minutes to Richard Taylor. Jim Tanner moved the minutes be approved as corrected. Lois Herndon seconded it and the motion carried.

VICE-PRESIDENTS and DIRECTORS AT LARGE: There were no reports.

TREASURER: George Payne reported that from 1 May 1989 to 12 October 1989, income was $7,190.75 and expenses were $5,088.35. Current assets are $61,787.13. He also presented a proposed budget for 1990. Both reports are filed with the secretary.

George Payne also reported a loss of two chapters, Bristol and Red River, leaving a total of twelve chapters with a membership of 796, a decrease of 162 members from 1988.

CURATOR: James Tanner reported that some back copies of ***The Migrant*** have been added to the collection, and he hopes that some of these will be sold.

EDITOR, ***The Migrant***: David Pitts reported that the March, 1989, issue of ***The Migrant*** has been typeset and will be mailed soon. The June, 1989, issue is ready for the printer.

David Pitts said he would like to return to Hodge Printing Company in Knoxville because the Allen Press is too expensive. The estimate of the cost of the last issue was $1,800, but the bill was $2,800. He would also like to return to the unique colors for the different seasons.

David suggested that there be a special issue for the 75th anniversary of TOS. This would be the June, 1990, ***Migrant***, and it would include pictures of the spring meeting. He would also like to include such articles as a history of TOS since the

50th anniversary to clearly document changes in TOS and in the field work results, a history of the fall meetings, a history of the bald eagles, and so on.

David asked for the Board's opinion of a new cover design to replace the 1937 one designed by Harry Ijams. Jim Tanner said that Harry Ijams himself thought the cover design should be redone because of some anatomical faults, but that other people say it is the best cover of all the bird journals. Lula Coffey suggested having a competition for a new design. Fred Carney suggested a silver cover for the 75th. There was a lengthy discussion of the various suggestions but no consensus.

A volunteer is needed to be compiler of the hawk count, and another to replace Damien Simbeck as compiler of the Christmas and spring bird counts. There has been no Christmas count at Reelfoot Lake recently, and that count needs to be reactivated and needs a compiler.

SECRETARY: Nancy Tanner asked for the names of the officers and directors of the four chapters which had not yet responded by mail.

NOMINATING COMMITTEE: Jim Ferguson had no report.

FINANCE COMMITTEE: Barbara Finney reported that the former chairman, Richard Taylor, has left Tennessee. She asked for nominations from the three divisions of the state for a two year appointment to the Finance Committee.

Fred Carney was nominated from West Tennessee by Helen Dinkelspiel.

Dan Gray was nominated from Middle Tennessee by Dick Newton.

Jim Tanner was nominated from East Tennessee by Chuck Nicholson.

Lois Herndon moved that the three nominees be accepted. Paul Hamel seconded the motion and it carried.

BREEDING BIRD ATLAS: Chuck Nicholson reported that field workers made very good progress during the recently completed fourth field season. With some increase in effort, most of the blocks in middle and east Tennessee can probably be finished next year. An additional sixth field season will be necessary to complete west Tennessee and fill in gaps elsewhere. There will be two forays next year, one of which will be in Martin.

Because of the rain this past season, less money was spent for blockbusters than was budgeted. This money will be carried over to the next field season. Several fund-raising activities are planned, including more birdseed sales, an end of the year mail appeal, and a bird-a-thon in the spring of 1990. Robbie Hassler has donated to the Atlas project a carving of a hummingbird to be sold for $200.

A proposal for publication of ***An Atlas of the Breeding Birds of Tennessee*** was accepted by the University of Tennessee Press and a contract drawn up for our signature. It provides for the manuscript to be completed by July 1, 1992. TOS will hold the copyright. The book will have 350 pages on species accounts and about 100 additional pages for introduction, appendices, and index.

Chuck Nicholson moved that we approve signing the contract with the U.T. Press for publication of the Atlas following approval by legal counsel. Audrey Hoff seconded the motion. Dick Newton moved an amendment to state that the contract be subject to the approval by TOS of the financial arrangements. Louise Jackson seconded the motion. The motion to amend was defeated. The original motion to approve signing the contract was passed. The contract was given to Mike McMahan for legal approval.

TENNESSEE BIRD RECORDS: Barbara ascertained that the only members still on the committee were from West Tennessee. Bob Ford is the member and George Payne is the alternate. She said she would welcome suggestions of members to be appointed for three year terms from East Tennessee and two year terms from Middle Tennessee.

CONSERVATION AND EDUCATION: Ken Dubke reported that he had notified Senator Morris Udall of the TOS support voted last May to establish the American Heritage Trust Act of 1989. Ken also spoke of his efforts on behalf of the Red-cockaded Woodpecker in Cherokee National Forest, for a wildlife observation area in Chattanooga, for Greenways, and against channelization of the Obed River.

After distribution of a resolution written by Paul Hamel to prevent channel work in the Tuscumbia River, Ken moved that TOS adopt the resolution. George Mayfield seconded it and the motion carried. A copy of the resolution was filed with the secretary.

Ray Jordan asked for TOS opposition to a landfill on the banks of Spring Creek in Overton County. No action was taken.

FALL SYMPOSIUM: Barbara Finney thanked David Snyder and George Mayfield for their work on the Fall Symposium. George reported that 78 members were registered. George suggested that the next fall meeting be at Montgomery Bell State Park. He would be glad to call the park now for reservations.

David Snyder would like to be replaced as Fall Symposium director, a position he has held for several years.

David Snyder showed a brochure on "Amphibians and Reptiles of Land Between the Lakes." It is free to teachers from the Center for Field Biology of LBL.

EDITOR, ***The Tennessee Warbler***: Jim Finney reported that the next issue will be March 1, 1990. The deadline for material will be the first week of February. Some copies of the ***Warbler*** were late in being delivered. George Payne explained that it is sent by third class permit and that the Post Office has thirty days to deliver such mail.

MEMBERSHIP: No new chairman will be appointed. Membership will be handled on the local chapter level.

TENNESSEE ENVIRONMENTAL COUNCIL: No report. At the 1989 Annual Meeting, TOS Board voted to continue membership indefinitely.

OLD BUSINESS: Jim Ferguson reported that the 75th anniversary spring meeting will be held at the Ramada Inn in Memphis. Details will be in the ***Warbler***. He requested that we fill out the questionnaires on interesting places to see in Memphis.

NEW BUSINESS: Helen Dinkelspiel nominated Jim Ferguson for Vice-President from West Tennessee. Lula Coffey seconded the nomination. The vote was unanimous.

George Payne moved that the TOS have a competition for designs for the cover of ***The Migrant*** and that the present cover be entered in the competition. Dick Newton seconded the motion and the motion passed. The competition will be publicized in the ***Warbler*** and ***The Migrant*** and by word of mouth in the local

chapters. Designs are to be sent to David Pitts. There could be a display at the spring meeting and a vote taken then.

Audrey Hoff spoke for Ron Hoff, whose proxy she carried. She moved that TOS institute an annual award to persons who have contributed the most to birding in Tennessee; that there be a committee to work out the details; and that the award go into effect at the 1990 spring meeting. Susan Hoyle seconded the motion. The motion carried.

There being no further business, the meeting adjourned at 5:45 p.m.

SYMPOSIUM

The program of 1989 TOS Symposium was arranged by David H. Snyder. The speakers and the titles of presentations follow.

Saturday afternoon (14 October)

Cumulative Impact Of Watershed Disturbance On Breeding Warblers In West Tennessee, by Robert P. Ford.

Bald Eagle Restoration On Dale Hollow Reservoir, by O. Ray Jordan.

Why Do Bluebirds Build Nests? by T. David Pitts.

Wintering Bird Populations In Fragmented Forests Of The Central Basin, by Joseph W. Wahl.

Results Of The 1989 Field Season Of The Tennessee Breeding Bird Atlas Project, by Charles P. Nicholson.

Foray Report, by Damien Simbeck.

Saturday evening

Swamps, Snags, And Snakes: Breeding Ecology Of The Prothonotary Warbler In Tennessee, by Lisa J. Petit (University of Arkansas).

Nancy Tanner, Secretary

The Migrant, 60(4):100-101, 1989

IN MEMORIAM: ADELE H. WEST

Kenneth H. Dubke
8139 Roy Lane, Ooltewah, TN 37363

Adele H. West, the motivating force behind the organization of the Chattanooga Chapter, TOS, died in Nashville on 28 August 1986 at the age of 77. Adele was born in Boston, Massachusetts; in her teens she moved to Manchester, New Hampshire to live with an aunt and uncle. After finishing high school she was employed by the New Hampshire Public Service Company. She attended a normal school in Keene, New Hampshire. In 1932 she moved to Nashville where she worked for the ***Nashville Tennessean*** newspaper. Later in 1932 she took a job with TVA at Wilson Dam, Alabama; there she met her future husband Eugene ("Gene") West. They were married on 26 April 1933 at Tuscumbia.

In 1946 Gene was transferred to Watauga Dam at Elizabethton. This is where Adele and Gene met Lee and Lois Herndon. The rest is now history. Up to this time

Adele had never done any birding, but when Lee found out about her latent interest he took her under his wing and offered expert guidance based on his many years of experience. Gene later transferred to Chattanooga.

Instilled by Lee Herndon with the goals and objectives of the TOS, Adele was encouraged to organize field enthusiasts in the area. On 19 August 1953 the organization was formed as the Chattanooga Bird Study club with 21 charter members. They were officially recognized by TOS President Mrs. Robert A. Monroe as the Chattanooga Chapter at a supper meeting on 10 March 1954.

Immediately the fledgling group scheduled regular meetings and field trips to the varied habitats in the area. Adele was responsible for noteworthy observations being submitted to ***The Migrant*** in the form of "Round Table" notes and "The Season" reports. In order to foster communication with members, Adele helped initiate a newsletter, ***The Chattanooga Chat***, and was its editor for five years.

The first Christmas Bird Count in Chattanooga was conducted in 1953 and the first spring count in 1954. Adele, with the enthusiastic support of Gene, organized the first area Hawk Counts in 1954. Members fanned out to fire towers on Elder Mountain, the Cumberland Plateau at Morgan Springs, Fall Creek Falls State Park, Daisy and the escarpment west of Sequatchie Valley northwest of Pikeville. Some members also observed from the Oswald Dome fire tower on Chilhowee Mountain in Polk County.

With Adele's expanding interest in birds and conservation she wrote a number of nature articles for the ***Chattanooga Times*** newspaper as well as the ***Tennessee Conservationist*** and ***Travel and Trailer Topics*** magazines. She and Gene made a number of 16mm color films on various nature subjects. She wrote the commentaries and presented them in person when they were shown to interested groups.

Adele birded in all 48 continental states, Alaska, Canada, Mexico, Panama, and Columbia, South America. In the 1960's Adele and Gene retired to Crossville where, because of health reasons, she was relatively inactive in bird study.

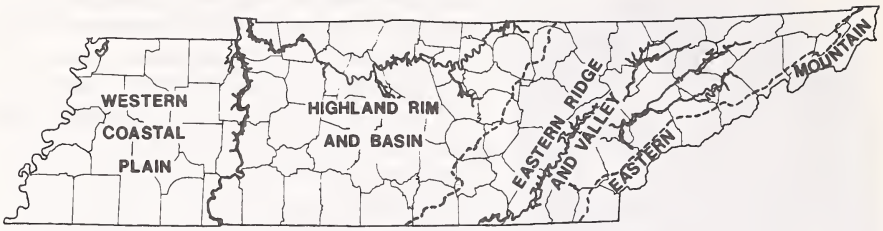
The seeds of bird study and conservation sown by Adele continue to flourish and thrive in the Chattanooga area today. Prior to her arrival, bird records from the area were scant and sketchy. The observations she recorded in ***The Migrant,*** and elsewhere, are the historical basis for our knowledge of avian distribution in the Chattanooga area. In addition to her writings, Adele's influence and legacy will continue to live on, as Gene has graciously donated her library of books to the Chattanooga Chapter. Future students will be forever grateful for all of her contributions.

Accepted 15 October 1989.

The Migrant, 60(4):102-110 , 1989

THE SEASON

Robert P. Ford, Editor



SUMMER: 1 JUNE — 31 JULY 1989

This summer season was the wettest in several years, presenting birds and birders with a change from recent drought conditions. Rainfall filled most lakes to capacity, and flooded bottomland hardwood forests in west Tennessee throughout the month of June, a first in recent memory. The extent of impacts to ground nesting birds was difficult to assess, although "considerable losses" occurred in the Eastern Ridge and Valley region. Many species, however, nested successfully later in the season, as noted for Least Tern in the Western Coastal Plain and Killdeer in the Eastern Ridge and Valley regions.

Regardless of high waters, observers for the Tennessee Breeding Bird Atlas project journeyed afield and, once again, supplied much of the information found in this report. Yellow-bellied Sapsuckers occurred in the eastern mountains; this is the first breeding season record in Tennessee for several years. Atlassers found new nesting locations for Grasshopper Sparrows in the Highland Rim and Basin region, and high densities were found in at least one area of the Eastern Mountain region. House Finch numbers continue to increase across the state. As this species continues to expand its breeding range, documentation of competition with other species would be valuable.

The season was especially eventful for herons, as new breeding locations were confirmed and at least one traditional heronry dissipated. Mixed species of herons and egrets were present throughout the period along the Mississippi River, a Great Blue Heron colony is suspected in the basin, and the first Great Blue Heron colony in Monroe Co., Eastern Mountain region, was documented. Black-crowned and Yellow-crowned Night-Herons may not have fared so well. The traditional Black-crowned heronry at Bordeaux apparently dispersed, and the regional compiler asks all observers to search for new locations of a heronry. In Chattanooga, the Yellow-crowned colony did not produce young this year. Details may be found in regional reports.

The most notable rare bird occurrence of the season was an immature Roseate Spoonbill, found in the Highland Rim and Basin region. This individual constituted only the second state record for this species. Observation of a Franklin's Gull was among other notable rare bird occurrences. Transient shorebirds arrived as expected in July, and are duly reported by region.

Abbreviations used in the following report include: ad - adult; EOP - end of period; ers - earliest fall migrant reported; in. - inch; m - meters; max - maximum number reported from 1 county in 1 day; yg - young; * - record has been documented.

WESTERN COASTAL PLAIN REGION — The summer season was relatively cool and wet. High temperatures were below normal in June (-1.3° F) and July (-1.1° F), while rainfall was above normal in June (+3.6 in.) and July (+3.52 in.). Summer residents and transients arrived as expected with attention given primarily to shorebirds at Ensley Bottoms Sewage Lagoons. Confirmations of nesting Bank Swallows and Least Terns reaffirmed the importance of preserving the fragile environs of the Mississippi River.

Grebe – Tern: Pied-billed Grebe: 26 Jun (2 ad, 2 yg) Tatumville marsh, DYC (Mark Greene). Double-crested Cormorant: 5 Jun (2) Phillipy Pits, LKC (WGC). Heron species: Sightings of mixed species of herons and egrets along the Mississippi River from SBC to LKC have substantiated the presence of wading birds throughout the summer season. Surveys by boat, car, and foot in DYC, Obion, and LKC have provided a great deal of information regarding the presence of large numbers of Great Blue Herons, Little Blue Herons, Great Egrets, and Snowy Egrets. Based on a survey by the U.S. Army Corps of Engineers, large numbers of herons and egrets were seen near Ensley Bar SBC in 1985 and 1989. Additional heronries in Tipton and LDC Counties at River Miles 757, 760, and 813 were observed in early Jun and Aug. Further river sightings were made in north DYC and south LKC (River Miles 842, 845). About 750 individuals of mixed heron/egret species were feeding at Phillipy Pits, LKC, River Mile 920 (WGC). Canada Goose: 2 Jun (4 eggs hatched, ad with bands) S.F. Forked Deer River, DYC (Ken Webster fide RPF). Blue-winged Teal: 5 Jun (1 male) Phillipy Pits, LKC (WGC); 29 Jun (2 ad, 8 yg) LHWR, LDC (Linda Watters, Assistant Refuge Manager), first nesting record for refuge; 10/17 Jul (1/20) Hwy 79W, LKC (WGC); 19 Jul (1) ESL (MGW, JEW); 23 Jul (7) Phillipy Pits, LKC (WGC). Hooded Merganser: 5 Jun (7) Phillipy Pits, LKC (WGC). Common Moorhen: 21 Jun (1) REL, LKC (TJW). King Rail: 7-23 Jun (2) LHWR, LDC(Linda Watters, Bobby Baker); 20 Jun (1) HWR (Glenn Harris). Osprey: 1 Jun - EOP (2 ad, nest with yg) Tennessee River and Cypress Creek, Henry Co. (Joyce North); 21 Jun (2) REL, LKC (TJW); 26 Jun (4) Markham/Hwy 78N, LKC (WGC); 25 Jul (1) HWR (Knox Martin). Cooper's Hawk: 25 Jun (1 heard) Cedar Grove, Carroll Co. (DFV). Lesser Yellowlegs: 10 Jun-19 Jul (1 - 10) ESL (CHB, VBR, MGW, JEW); 17 Jul (13) Hwy 79W, LKC (WGC). Solitary Sandpiper: 12-22 Jul (18) ESL (CHB, VBR, MGW, JEW); 17 Jul (5) Hwy 79W, LKC (WGC); 17/23 Jul (1/2) Phillipy Pits LKC (WGC). Western Sandpiper: 10 Jun (1) ESL (VBR, CHB); 10 Jul (3) Hwy 79W, LKC (WGC); 22 Jul (3) ESL (MGW, JEW); 23 Jul (5) Phillipy Pits, LKC (WGC); 24 Jul (6) Is 13 (WGC). Pectoral Sandpiper: 10 Jun-22 Jul (1-344) ESL (CHB, VBR, MGW, JEW). Stilt Sandpiper: 19/22 Jul (1/4) ESL (MGW, JEW). Long-billed Dowitcher: 19 Jul (3) ESL (MGW, JEW), identified by call. Least Tern: In early Jun, many islands with nests containing three eggs were found during a survey by small boat. However, a rising river inundated islands, and nests were subsequently destroyed. A second survey was conducted after the river began to drop in early August. Terns nested a second time with only two eggs per nest. Terns nesting on some higher islands apparently were successful, as young birds were observed. A more comprehensive report will be published later.

Table 1. Results from a Chuck-will's-widow (CWW) and Whip-poor-will (WPW) Survey in southern west Tennessee

			CWW		WPW	
Date	County	Kilometers Surveyed	Total	No. per km	Total	No. per km
16/17 Jun	Madison	112	76	.68	30	.26
19/20 Jun	Fayette	88	145	1.6	27	.31
19/20 Jun	Hardeman	23	19	.82	4	.17

Goatsuckers: Numbers of Chuck-will's-widows (CWW) and Whip-poor-wills (WPW) were lower than those found in 1988 in west Tennessee, although different counties were surveyed this year (Table 1, BBC and LCC).

Swallow – Finch: Swallow species: 9 Jul (300+) Bank Swallow, Tree Swallow, Purple Martin, Phillipy Pits, LKC (WGC). Tree Swallow: 5/9 Jul (10/12 ad, 2 yg) Phillipy Pits, LKC (WGC). Bank Swallow: 26 Jun (150 holes) Heloise, DYC (WGC); 5 Jul (5) Phillipy Pits, LKC (WGC); 29 Jun (600 holes) east bank, MS river, 3.2 km N of Randolph, LDC, (175 holes) Chickasaw Bluff No. 2, 1.6 to 3.2 km S of Randolph, Tipton Co. (BBC, LCC, JBG); 17 Jul (130) Champey's Pocket, REL (WGC). Barn Swallow: 26 Jun (50 nests) I-55 overpass and Delaware St., SBC (BBC, LCC), fewer than 3 previous years. Bewick's Wren: 30 May (1) 3.2 km NE of Camden, about 1.6 km N of a bird taped 3 Jul 1984, Benton Co. (BBC, LCC). Loggerhead Shrike: 29 May (1) NE of Mifflin, Chester Co.; (1) SW of Lexington, Henderson Co. (BBC, LCC). Pine Warbler: 6 Jun (1) PEF (HBD, VBR); (1) SE SBC (MGW). Cerulean Warbler: 12 Jun (1) SFP (BBC). Black-and-white Warbler: 25 Jun (1) Cedar Grove, Carroll Co. (DFV). Worm-eating Warbler: 12 Jun (1) SFP (BBC, LCC). Swainson's Warbler: 28 May (1) S of La Grange N of Wolf River, Fayette Co. (BBC, LCC). Scarlet Tanager: 3 Jun (3) HWR (BBC, LCC, JBG); 23 Jul (1) Sugartree, east central Decatur Co. (CHB). Bachman's Sparrow: 9 Jun (1) Pine Top, Chester Co. (BBC, LCC), only one for this season although several areas were checked. Grasshopper Sparrow: 4/7 Jul (6/3) Hwy 79W, LKC (WGC). House Finch: Memphis, Jackson, and other west Tennessee locations reported nesting finches. BBC has banded 414 this season. Several banded birds have been reported in SBC this summer.

Locations: DYC-Dyer Co.; ESL-Ensley Bottom sewage lagoons, Shelby Co.; HWR-Hatchie Natonal Wildlife Refuge, Haywood Co.; Is 13-Island 13, Lake Co.; LDC-Lauderdale Co.; LHNWR-Lower Hatchie Natonal Wildlide Refuge, Tipton and Lauderdale Cos.; LKC-Lake Co.; PEF-Penal Farm, Shelby Co.; REL-Reelfoot Lake; SBC-Shelby Co.; SFP-Shelby Forest State Park, Shelby Co.

MARTHA G. WALDRON, 1626 Yorkshire Dr., Memphis, TN 38119

HIGHLAND RIM AND BASIN REGION — In Nashville, over twice the normal rainfall was recorded in Jun and temperatures were below normal. In Jul, rainfall was .64 in. below normal and temperatures were virtually normal.

The most notable record for the season was an immature Roseate Spoonbill, present at Cross Creeks National Wildlife Refuge (CCNWR) for much of the period. A number of non-nesting species of ducks spent the summer there, and others arrived exceptionally early. A pair of Scissor-tailed Flycatchers was present for much of the period, lingering into mid-Jun before disappearing. Tennessee Breeding Bird Atlas field workers recorded encouraging numbers of Red-headed Woodpeckers and Grasshopper Sparrows in the region.

The most alarming development in the region was the abandonment of the Bordeaux Heronry in Nashville. This Black-crowned Night-Heron colony, active since 1953, has been occupied by as many as 700 herons (1984). However, not one active nest was recorded this season. The presence of herons feeding on the river near the old heronry suggests that the birds may have established a new heronry in the general vicinity, or combined with a known heronry on Old Hickory Lake. Area birders are encouraged to make every effort to locate any new heronries, or to note any increases in existing heronries.

Grebe–ducks: Pied-billed Grebe: 12 Jul (1) OHL, DVC (RYN, MLM). Least Bittern: 8 Jul (1) BWMA, SWC (DWB), only report. Great Blue Heron: 23 July (83) CCNWR, SWC (DWB), max.; an unexpectedly high number of Great Blue Herons recorded across the basin by Tennessee Breeding Bird Atlas observers in Jun and Jul suggests the possibility of an unknown heronry in this region. Great Egret: 21 Jun (2) Nashville, DVC (DWB); 8 Jul-EOP (1-3) CCNWR, SWC (DWB). Snowy Egret: 18 Jul-EOP (1-2) CCNWR, SWC (DWB). Little Blue Heron: 22 June (3) I-24 S of Nashville, DVC (DWB); 30 May-25 Jun (1 im) Hendersonville, DVC (RYN); 8 Jul (5) BWMA, SWC (DWB); 23 Jul (55) CCNWR (DWB), max. Yellow-crowned Night-Heron: 13 Jul (9) SWC (DWB), max. White Ibis: 30 Jul (1 im) BCWMA, SWC (DWB). ROSEATE SPOONBILL: 23 Jul (1 im*) CCNWR, SWC (DWB, m.ob.), 2nd state record, 1st SWC record. Wood Duck: 18 Jul (111) CCNWR, SWC (DWB), max. Gadwall: 25 Jul (2) CCNWR, SWC (DWB), ers. American Wigeon: 1 Jun-EOP (2) BWMA, SWC (DWB), these 2 birds were present during much of the spring period, and include an injured male that is unable to fly and a healthy female. Redhead: 24 Jul (1) CCNWR, SWC (JRW). Ring-necked Duck: 18 Jul-EOP (1-2 ad) CCNWR, SWC (DWB).

Raptors: Black Vulture: 6 Jun (1 ad and 2 nestlings) near Verona, Marshall Co. (DFV), nest with yg in limestone sink; 24 Jul (1 nestling) near Kingston Springs, Cheatam Co. (Tim Higgs, fide DFV), nest under rock bluff on small creek. Turkey Vulture: 6 Jun (1 ad, 2 yg) near Verona, Marshall Co. (DFV), this nest was discovered less than 50 m from the above Marshall Co. Black Vulture nest. Osprey: 17 Jun (1) Cane Creek, Houston Co. (DWB); 8 Aug (1) Stones River, RUC (MLM). Bald Eagle: 6-7 Aug (2 ad) CCNWR, SWC (JRW, Dollyann Daily). Northern Harrier: 29 Jul (1) CCNWR, SWR (JRW, Dollyann Daily). Sharp-shinned Hawk: 17 Jun (2 ad) near Indian Mound, White Co. (DFV), agitated pair was observed in grove of Loblolly Pines calling as if nest was nearby. Cooper's Hawk: 9 Jun (1 ad) near Christiana, RUC (DFV), bird was carrying food, apparently, to feed young; 13 Jun (1 ad) Defeated Creek Campgroud, Cordell Hull Res., Smith Co. (fide DFV); 16 Jun (1 ad) near Rowland, Warren Co. (DFV), carrying food.

Shorebirds – Owls: Spotted Sandpiper: 4 Jun (1 ad, 1 yg) Metro Center, DVC (DFV), 1 ad seen with 1 chick approximately 1 or 2 days old; 1 Jul (1) CCNWR, SWC (DWB), earliest fall arrival for region. Semipalmated Sandpiper: 22 Jul (2) CCNWR, SWC (DWB), ers. Western Sandpiper: 17 Jul (3) BWMA, SWC (DWB), ers. Least Sandpiper: 17 Jul (3) BWMA, SWC (DWB), ers. Pectoral Sandpiper: 8 Jul (1) CCNWR, SWC (DWB), ers. Stilt Sandpiper: 22 Jul (2) CCNWR, SWC (DWB), ers. Wilson's Phalarope: 23 Jul (1) CCNWR, SWC (DWB), ers. FRANKLIN'S GULL:24 Jul (1 im*) CCNWR, SWC (DWB, JRW). Caspian Tern: 8 Jul (1) BWMA, SWC (DWB), ers. Black Tern: 18 Jul (2) CCNWR, SWC (DWB), ers. Barn Owl: 11 Jun (2 ad, 2 or more yg) Murfreesboro, RUC (Richard Hunter, Wilma Hunter), observers reported Barn Owls nesting in same tree cavity for more than 6 years.

Woodpecker – Finch: Red-headed Woodpecker: several observers from various areas of the region reported this species in higher than expected numbers this season. SCISSOR-TAILED FLYCATCHER: 1 Jun-16 Jun (2) Seal's Farm, Franklin Co. (Ruth W. Luckado), these 2 birds were present through much of the previous period and lingered into the summer, nesting was not detected. Willow Flycatcher: 4 Jun (4) Metro Center, DVC (DFV); 22 Jun (2) CCNWR, SWC (DWB), nest found; 23 Jul (7) CCNWR, SWC (DWB), max. Horned Lark: 23 Jun (2 ad, 1 yg) Fairview Middle School, Wiliamson Co. (ATT), this record constitutes one of only a few occurrences of nesting Horned Lark in the region in recent years. Purple Martin: 29 Jul (1090) SWC (DWB), max. Carolina Chickadee: 17 Jun (1 albinistic individual in a family group of 6 birds) Indian Mound, Dekalb Co. (DFV). Bewick's Wren: 1 Jun-EOP (2 ad) Carothers Rd., DVC (Richard H. Conners), this pair raised 2 broods at this location; 1 Jun-10 Jul (2) Cypress Inn, Wayne Co. (DJS); 17 Jun (6) SWC (DWB), 6 birds observed at 5 Westvaco Timber clearcuts. Cedar Waxwing: 17 Jun (2) McKinnan Airport, Houston Co. (DWB); 4 Jul (3) Dover, SWC (DWB); 18 Jul (4) Montgomery Co., (2) WSB, SWC (DWB). American Redstart: 14 Jun (2) near Goose Horn, Jackson Co. (DFV); 17 Jun (1) Cane Creek, Houston Co. (DWB). Dickcissel: 16 Jun (1) Belvidere, Franklin Co. (GRM); 1 Jun-EOP (10 singing males) CCNWR, SWC (DWB); 1 Jun-EOP (3 singing males) BWMA, SWC. Lark Sparrow: 1 Jun-10 Jul (10 ad, 15 yg) Cypress Inn, Wayne Co. (DJS); 26 Jun (1) Sulfer Springs Rd., RUC (DWB). Grasshopper Sparrow: Atlassing efforts resulted in several new locations for this species in the region; 7 Jun (1) near Hall's Mill, Bedford Co. (DFV); 8 Jun (1) Caters Crossroads, Bedford Co. (DFV); 16 Jun (2) Belvidere, Franklin Co. (GRM); 16 Jun (3) near Rowland, Warren Co. (DFV). Northern Oriole: 12 Jun (1 male) New Middleton, Smith Co. (DFV). House Finch: 24 Jun (2 ad,1 yg) Dover, SWC (DWB).

Addendum: Spring 1989 - Tree Swallow: 27 May 1989 (2 ad) Linclon Lake, Lincoln Co. (GRM), an active nest with young was observed in a dead tree standing in Lincoln Lake.

Locations: BCWMA-Bear Creek Waterfowl Management Area; BWMA-Barkley Wildlife Management Area; CCNWR-CrossCreeks National Wildlife Refuge; DVC-Davidson Co.; OHL-Old Hickory Lake; RUC-Rutherford Co.; SWC-Stewart Co.; WSB-Wiley's Springs Bay.

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EASTERN RIDGE AND VALLEY REGION — This was the wettest summer in several years and the wettest Jun-Jul period on record in the Chattanooga area. Rain was heaviest in the southern part of the region and declined toward the north, especially in July. Rainfall totals and deviations from the normal for the 3 main reporting stations are as follows: Chattanooga - June 9.2 in. (+5.9 in.) and July 9.9 in. (+5.4 in.), Knoxville - 9 in. ("over twice the normal amount") and 4.3 in. ("near average"), Johnson City - 6.6 in. (+3.2 in.) and 3 in. (-1.2 in.). After several years of drought, these heavy rains raised the water table and kept lakes filled to capacity, but caused local flooding. As a result, ground nesting birds suffered considerable losses. Some fared better later in the season. For example, very few early broods of Killdeer were seen in the Johnson City area, but more than the expected number in mid-Jul (pers. obs.). Temperatures were near normal, very different from last year's scorcher.

Once again, atlas work produced much of the information in this report. Numerous interesting finds are detailed below. Coverage was from slightly over half of the counties in the region, down a little from last year; but, this is still better than most summers. As expected, some wandering herons and the first wave of southbound shorebirds were encountered.

Loon – Ibis: Common Loon: 4 Jun/1-31 Jul (1/1-2) CHL (Donald L. Rush, Jr./RJH). Double-crested Cormorant: 1 Jun (5) CHL (Donald L. Rush, Jr.); 19-20 Jun (1) JNC (FJA), first local summer record; 30 Jun (1) HRA (WKJ), "no nest records yet, although reported regularly during recent summers" (CPN). American Bittern: 8 Jul (1 calling) Brainerd Levee, CHA (Paul C. Harris, Jonnie Sue Lyons). Least Bittern: 5 Jul (1) Washington Ferry, CHL, RHC portion (WKJ); 10 Jul (1) southern Morgan Co. (CPN). Great Blue Heron: no report on status of nesting colonies. Great Egret: 10 Jun (1) Tellico Lake, Monroe Co. (JAK); 17 Jun (1) CHA (RCS); 12 Jul-EOP (1) SAB (KHD, LHD). Little Blue Heron: 8/13 Jul (2) CHA (Paul C. Harris, Jonnie Sue Lyons/William C. Olson), only report. Black-crowned Night-Heron: 6 Jun (6-8) Boone Dam, SLC/WGC (FJA); 21 Jun (3) KPT (FJA); only reports. Yellow-crowned Night-Heron: 16 May (1 nest with yg) Lesser Alcoa Marsh, Blount Co. (CPN, ARH, RDH); 5 Jun (1 ad) Big Limestone Creek, WGC (RLK); "it appears no yg fledged from the Brainerd Levee, CHA, colony this year, suspected reason was constant harassment by crows" (Judy Boyles). White Ibis: 14/23 Jun (8 im/11 im) SAB (KHD, LHD).

Goose – Rail: Canada Goose: several nests flooded in JNC area (RLK). HOODED MERGANSER: 13 Jun (3 im) AUS (RLK), may represent first local breeding; 28 Jun/22 Jul (1 male) KSP (Terry J. Witt/ KHD, LHD, RJH et al.). Osprey: lower numbers on Watts Bar Lake, MEC, RHC, RNC, this year (13 nests with yg, 18 in 1988), reason for decrease unknown; nest with yg at new location on Melton Hill Lake, ANC; unsuccessful nest again at HRA; success of nest near Clinton, ANC, unknown (fide Ed Beddow, Bruce Anderson). Bald Eagle: 22 Jul (1 im) Watts Bar Lake, RNC portion (WKJ). Sharp-shinned Hawk: single reports from CIC and MEC (RDH, CPN). Cooper's Hawk: reported from at least 5 locations in HKC and CIC (RDH, George W. McKinney), 2 locations in GNC (RLK), and 1 location in SLC (BLC); 23 Jun (nest with 4 yg) Panther Creek S.P., HBC (Howard Chitwood). Peregrine Falcon: 11 Jul (1 im) downtown CHA (Ralph T. Brown). King Rail: 11 Jun (1) Blythe Ferry Goose Area, HRA, MEC portion (Johnny Parks, C. Del Blum), heavy rains 10 days later flooded area.

Plover – Woodpecker: Semipalmated Plover: 22 Jul (1) KSP (RCS, RJH et al.), ers. Lesser Yellowlegs: 4 Jul (1) LST (RLK), ers. Solitary Sandpiper: 17 Jul (1) LST (BLC), ers. Willet: 28-29 Jun (1) LST (BLC). Semipalmated Sandpiper: 16 Jul (4) KSP (KHD, LHD), ers. Western Sandpiper: 22 Jul (1) KSP (RCS, RJH et al.), ers. Least Sandpiper: 22 Jul (5) KSP (RCS, RJH et al.), ers. Pectoral Sandpiper: 22 Jul (1) KSP (RCS, RJH et al.), ers. American Woodcock: 13 Jun (2) KPT (FJA). Caspian Tern: 16 Jul (9) KSP (KHD, LHD). Black Tern: 20 Jul (3) LST (RLK). Black-billed Cuckoo: 13 Jun (1) SLC (BLC); 19 Jun (1) near Glenmary, SOC (CPN), rather rare in summer. Barn Owl: 20 Jun (3 yg in nest tree) Birchwood, HLC (KHD, LHD); 2 active nest sites in JNC, 1 nest fledged at least 4 yg (LHTOS); 6 Jul (1 im) Boone Lake, SLC portion (fide Ken Ripley). Red-headed Woodpecker: 22 June (pair) McDonald, Bradley Co. (LHD, Gertrude Fleming); 10-12 regular at Hixson and Chester Frost Park, HLC (RJH); pair with 2 yg at LST (BLC).

Flycatcher – Shrike: Willow Flycatcher: 11 Jun (2-3) HRA (Johnny T. Parks, C. Del Blum), present at this site for at least 5 years, breeding not yet confirmed; 24 Jun (1) near Baileyton, GNC (RLK); 1 new location near Harrogate, CIC (ARH, RDH); also reported from several usual sites. Least Flycatcher: 3 Jun (1) near Norma, SOC (CPN) "has been found several times in general area during last few years, but no nesting evidence yet" (CPN). Horned Lark: 3 Jun (1) Roaring Creek, RHC (KHD); 8 Jun (1) Chucky Bend, COC (RLK); 29 Jun (1) strip mine near Winona, SOC (CPN); uncommon over most of east Tennessee. Tree Swallow: pair nested at AUS (FJA, RLK), 2nd nesting there; 5 Jun (1) Nolichucky River, WGC (RLK); 6 Jun (1) Tri-cities Airport, SLC (FJA); 13 Jun (pair) KPT (FJA); Jun sighting at Panther Creek S.P., HBC (Howard Chitwood); continues to expand in region. Cliff Swallow: new colony along Clinch River below Norris Dam, ANC, and previously unreported colony on Hwy. 61 bridge at Clinton, ANC (CPN); increased numbers at some other established colonies. Eastern Bluebird: good nesting season, with many broods in northeastern portion of region (fide RLK). Cedar Waxwing: "present in good numbers early in season, but much less nesting evidence reported than in 1988" (CPN); nested in CIC and again at Norris, ANC (RDH, CPN). Loggerhead Shrike: good season for this usually scarce species, with breeding evidence from Bradley, CIC, HBC, HKC, HLC, Loudon, MEC, and Monroe Cos., plus Jun sightings in COC, GNC, Hawkins, SLC, and WGC (m. ob.).

Vireo – Finch: Warbling Vireo: 5 Jun (1) Nolichucky River, WGC (RLK); 22 Jun (1) eastern GNC (RLK); 25 Jun (ad with yg) HKC (ARH, RDH), rare in region. Blue-winged Warbler: 2 singing males (1 with mate) Fiery Gizzard Cove, Marion Co. (J.N. Howard, Ella C. Howard), few summer records in region. Prothonotary Warbler: 2 pairs at AUS (RLK); 13 Jun (1) KPT (FJA); 12 Jun (1) western GNC (RLK), rare in northeastern portion of the region. Swainson's Warbler: 27 Apr-6 Jun (1 singing daily) Fiery Gizzard Cove, Marion Co. (J.N. Howard, Ella C. Howard), 1 present in 1988 also, rare in region. Dickcissel: 11 Jun (1) Newport, COC (ARH, RDH); 16/25 Jun (3/2) Daus, Sequatchie Co. (Robert L. Pierce); 17 Jun (2) Spring Branch, McMinn Co. (Robert L. Pierce, KHD, LHD); 7 Jul (4) Wetmore, Polk Co. (CPN). Northern Oriole: 3 Jun (nest) Newport, COC (ARH, RDH); 8 Jun (1) HKC (ARH, RDH); 22 Jun (1) Chuckey, GNC (RLK); 24 Jun (1) Baileyton, GNC (RLK). House Finch: "continues to increase and expand; record high numbers on some

BBS routes this year; has not yet saturated the area; more study of local movement patterns would be valuable" (CPN).

Locations: ANC - Anderson Co.; AUS - Austin Springs, Washington Co.; CHA - Chattanooga; CHL - Chickamauga Lake, Hamilton Co. portion; CIC - Claiborne Co.; COC - Cocke Co.; GNC - Greene Co.; HBC - Hamblen Co.; HKC - Hancock Co.; HLC - Hamilton Co.; HRA - Hiawasee River Area, primarily Meigs Co., but also Bradley, McMinn, and Rhea Cos.; JNC - Johnson City; KPT - Kingsport; KSP - Kingston Steam Plant, Roane Co.; LST - Limestone, Washington Co.; MEC - Meigs Co.; RHC - Rhea Co.; RNC - Roane Co.; SAB - Savannah Bay, Hamilton Co.; SLC - Sullivan Co.; SOC - Scott Co.; WGC - Washington Co.

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EASTERN MOUNTAIN REGION — Precipitation was above normal in June (+6.65 in.), and about average in July. Temperatures were about average, with highs usually in the 80's, and rarely exceeding 90° F. Some good records were turned in this period, largely the result of breeding bird atlas work.

Loon – Swallow: Common Loon: 21-29 Jun (1, winter plumage) WIL (RLK). Great Blue Heron: new colony of about 50 nests reported at Chota Wildlife Refuge, Tellico Lake, Monroe Co. (fide WKJ), first nest record for lake and county. Ring-necked Duck: 18 Jun (1 male) WTR (RLK). Hooded Merganser: 18 Jun (1 female) WTR (RLK). Bald Eagle: 29 Jul (1 ad) TEL (ARH, RDH, CPN). Sharp-shinned Hawk: 4 Jun (1) LBL (DBM), carrying food, apparently for young; 7 Jul (1) Ducktown, Polk Co. (CPN), carrying food. Solitary Sandpiper: 4 Jun (1) TEL (JAK). YELLOW-BELLIED SAPSUCKER: 14-15/29-30 Jun (5+) Whigg Meadow, Cherokee National Forest, Monroe Co. (CPN), first breeding season reports in state in several years. Olive-sided Flycatcher: 2 Jun (1) MTC (DBM), late migrant. Willow Flycatcher: 2-3 Jun (19-20 singing males) MTC (DBM), all in one atlas block. Alder Flycatcher: 18 May-9 Jul (6-8 singing males) RNM (Brenda Hull, fide FJA); 3 Jun (1 singing male) MTC at 2800 ft (DBM). Least Flycatcher: 4 Jun (1) LBL at 2800 ft (DBM). Tree Swallow: 13/21 Jun (pair) WTR (RLK), seen entering tree cavity; pair at Butler, Johnson Co. motel sign nest site (used in 1988) (James W. Brooks). Cliff Swallows: colonies at 2 bridges (20+ and 6+) active thru period, SHL (RPL).

Raven – Vireo: Common Raven: 17 Jun (2) UMT (RLK, BLC). Red-breasted Nuthatch: 1-4 birds present on UMT and RNM (RLK). Brown Creeper: 3-4 Jun (1) LBL, 1031 m (DBM); 1 Jul (2) Ripshin Mt., Carter Co. (RLK), 1031 m and 1334 m. Winter Wren: birds seen at LBL, UMT, Ripshin Mt., RNM (RLK). Golden-crowned Kinglet: present on RNM and UMT (RLK). Cedar Waxwing: 1 Jun (pair building nest) Hartford, Cocke Co. (RDH, ARH); 2-3 Jun (nest with yg) MTC (DBM). Warbling Vireo: 3-4 along WTR (LHTOS); 3 near SHL (RPL).

Warbler – Finch: Blue-winged Warbler: 28 Jun (1 male) near Sam's Gap, Unicoi Co. (BLC). MAGNOLIA WARBLER: 8/17 Jun (1 singing male) UMT (FJA/RLK, BLC). BLACKBURNIAN WARBLER: 3 Jun (1) LBL (DBM). American Redstart: 2 Jun (1) MTC (DBM); 9 Jun (1) WTR (BLC). Swainson's Warbler: 2 singing males thru June, Hoss Cove, Washington Co. (RPL). Vesper Sparrow: 4-5 Jun (3 singing birds plus pair with 1 yg) LBL (DBM); mid-Jun (1) Roger's Ridge,

Johnson Co. (Edward H. Schell). Grasshopper Sparrow: 4 Jun (17 singing males in one atlas block) LBL (DBM). Northern Oriole: 2 Jun (nest) MTC (DBM); 11 Jun (pair) Walland, Blount Co. (JAK); 21 Jun (pair with 2 yg) Hampton, Carter Co. (RLK). House Finch: 3 Jun (recently fledged yg) MTC (DBM).

ADDENDA: Spring 1989 - Common Loon: 3/5 May (1) Parksville Lake, Polk Co. (JCW). Double-cresed Cormorant: 5 May (4) Parksville Lake, Polk Co. (JCW). Great Egret: 13 April (1) Hiawassee River, Polk Co. (JCW). Olive-sided Flycatcher: 31 May (1) 515 m near Hartford, Cocke Co. (RDH, ARH), probable migrant.

Locations: LBL - Laurel Bloomery, Johnson Co.; MTC - Mountain City, Johnson Co.; RNM - Roan Mountain, Carter Co.; SHL - South Holston Lake area, Sullivan Co.; TEL - Tellico Lake, Monroe Co.; UMT - Unaka Moutain, Unicoi Co.; WIL - Wilbur Lake, Carter Co.; WTR - Watauga River, Carter Co.

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OBSERVERS

FJA — Fred J. Alsop
DWB — Donald W. Blunk
CHB — Carolyn H. Bullock
BBC — Ben B. Coffey, Jr.
LCC — Lula C. Coffey
WGC — William G. Criswell
BLC — Brian L. Cross
KHD — Kenneth H. Dubke
LHD — Lillian H. Dubke
RPF — Robert P. Ford
JBG — Joe B. Guinn
RJH — R. John Henderson
ARH — Audrey R. Hoff
RDH — Ron D. Hoff
WKJ — Wesley K. James
RLK — Richard L. Knight
JAK — J. Anthony Koell
RPL — Richard P. Lewis
MLM — Margaret L. Mann
GRM — George R. Mayfield, Jr.
DBM — Douglas B. McNair
RYN — Richard Y. Newton
CPN — Charles P. Nicholson
VBR — Virgina B. Reynolds
DJS — Damien J. Simbeck
RCS — Randy C. Stringer
ATT — Ann T. Tarbell
DFV — David F. Vogt
MGW — Martha G. Waldron
JEW — James E. Waldron
JCW — J. Craig Watson
JRW — Jeff R. Wilson
TJW — Terry J. Witt
LHTO — Lee R. Herndon Chapter TOS

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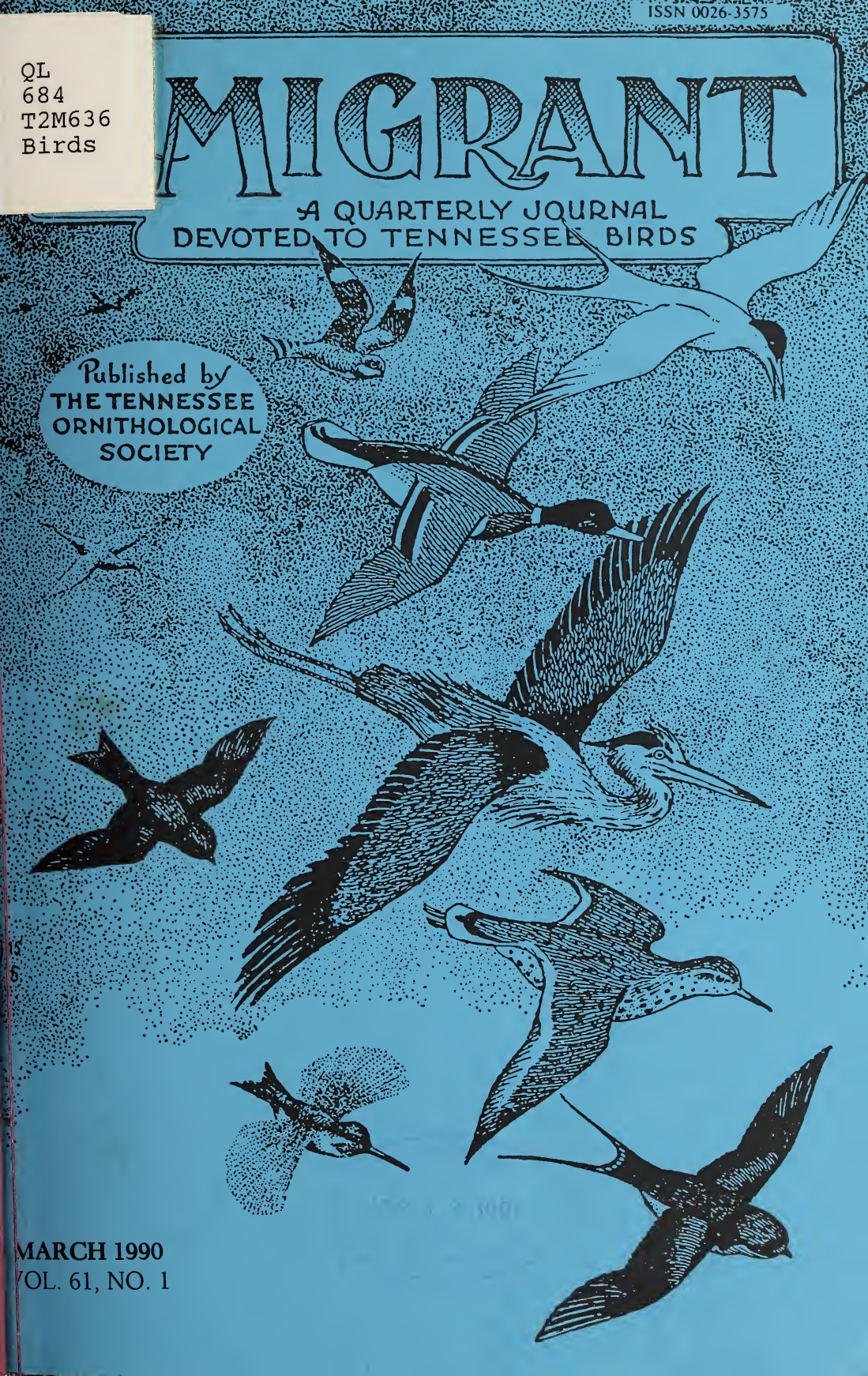
Birds

ISSN 0026-3575

MIGRANT

A QUARTERLY JOURNAL
DEVOTED TO TENNESSEE BIRDS

Published by
THE TENNESSEE
ORNITHOLOGICAL
SOCIETY



MARCH 1990
VOL. 61, NO. 1

THE MIGRANT

A QUARTERLY JOURNAL OF ORNITHOLOGY

FIRST ISSUE PUBLISHED IN JUNE 1930

PUBLISHED BY

THE TENNESSEE ORNITHOLOGICAL SOCIETY

Founded at Nashville, Tennessee on 7 October 1915
The T.O.S. is a non-profit, educational, scientific,
and conservation organization.

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Published quarterly (March, June, September, and December).
Printed by Tennessee Industrial Printing Services, Inc., 51 Miller Ave., Jackson, TN 38305.

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THE MIGRANT

Published by the Tennessee Ornithological Society,
to Record and Encourage the Study of Birds in Tennessee.
Issued in March, June, September, and December.

VOL. 61 March 1990 NO. 1

The Migrant, 61(1):1-10, 1990

THE 1989 CHRISTMAS BIRD COUNT

Damien J. Simbeck

A total of 25 counts was conducted in Tennessee during the 1989-1990 season, tallying 145 species, plus two other count week species. The weather was big news this year. Prior to the count period, fairly mild weather prevailed over most of the state. However, as the count period began, the jet stream steered south from Canada, sending frigid arctic air into the state. Temperatures during the first week fell below freezing, while the second week recorded record breaking temperatures below zero. Temperatures returned to mild for the third week, though most of the counts held then still reported frozen water. The three counts conducted during the second week broke the state's coldest temperature records. Savannah, with a high of only 6°F, broke the coldest high temperature record of 13°, set on Roan Mountain in 1962. Nashville and Columbia each broke the record for coldest temperature of -1° set at Great Smoky Mtns. NP. in 1976. Columbia now holds the record over Nashville by one degree with a low of -11°.

Most of the rare species recorded this year fall into the lingering species or vagrant catagories. Only a few species were pushed south by the cold. Northern finches made a small invasion, with Pine Siskins found on all counts, Purple Finches on most, and White-winged Crossbills on a state CBC for only the 7th time. Two species make their first appearance on a Tennessee CBC. These are a Great Black-backed Gull at Hickory-Priest and a poorly described, but acceptable Black Rail in the Smokys. This brings the state list to about 216 species. Notable non-lingerers include Red-necked Grebe (3rd CBC record), Tundra Swan on two counts, Mute Swan (5th), Oldsquaw on two counts, and White-winged Scoter (8th). Though all records of Mute Swans are questionable due to their origin, the fact that these birds were found after the major cold spell, were with a large migratory flock of Canada Geese, and were only two of many (50+) Mute Swans found in Kentucky, Tennessee and Alabama at approximately the same time, seems to indicate a good chance these birds came from the Great Lakes population.

Notable ligering species include Merlin on three counts, Lesser Yellowlegs (5th), Rufous Hummingbird (2nd), House and Marsh Wrens, Palm Warbler, Common Yellowthroat, Dickcissel (6th), and Lincoln's Sparrow. Perhaps some of these birds (i.e. Merlin, House and Marsh Wrens, Lincoln's Sparrow) represent individuals imprinted on our state as a winter home, due to past mild winters, and did not respond to the cold fronts of late December. Could we also be seeing a start

of nature's response to global warming? Are these species becoming more regular on our counts due to an overall increase in temperature, and are they thus traveling a shorter distance each winter? We may only be seeing the results of an increase in observer effort to find and identify that rare bird. Only time and continued observer efforts will tell.

As usual, the counts are tabulated from west to east.

INFORMATION ON THE COUNTS

MEMPHIS — 17 Dec; 0630-1645; cloudy with trace snow cover; temp. 17-27°F; wind SW 0-5 mph; water frozen; 35 observers in 8-10 parties plus two at feeders; 126 party hours (96 on foot, 30 by car) plus 6 at feeders, 2 owling; 194 party miles (73 on foot, 121 by car) plus ? owling. Good details submitted for Merlin (HV), Peregrine Falcon (RE,BB), Lesser Yellowlegs (DB,TF,MG,MW), and Common Yellowthroat (DB,GB,MW). 99 species, 21,515 individuals. Buzz Bean, Dianne Bean, Gilbert Beaver, Carolyn Bullock, Fred Carney, Robert Casey, Ben Coffey, Lula Coffey, Chris Creech, Julian Darlington, Harold Elphingstone, Robert Endres, James Ferguson, Robert Ford, William Fowler, Tim Furr, Murray Gardler, Van Harris, Ginger Ilardi, Robert Ilardi, David Kessler, Joe Knack, Jo Levy, Selma Lewis, George Payne, Jeanne Payne, Rob Peeples, Dick Preston, Ernie Restivo, Virginia Reynolds, Arlo Smith, Noreen Smith, Howard Vogel, Martha Waldron (compiler- 1626 Yorkshire Dr., Memphis 38119), Jeff Wilson.

REELFOOT LAKE — 19 Dec; 0630-1700; cloudy to clear; temp. 20-25°F; wind 5-10 mph N; water frozen; 10 observers in 4 parties plus 1 at feeder; 34 party hours (22 on foot, 12 by car) plus 4 at feeder; 160.5 party miles (14.5 on foot, 146 by car). Coffey party had Spotted Sandpiper at waste-water treatment lagoon. First time House Finches have been reported. 79 species, 612,618 individuals. Ben Coffey, Lula Coffey, Harold Elphingstone, Bob Ford, Mark Greene, Frank McCamey, David Pitts (compiler-Biology Dept. UTM, Martin 38238), Bryan Schultz, Glenn Stanley, Bettie Sumara, Eddie Wilbanks.

SAVANNAH — 22 Dec; 0315-0445, 0630-1700; AM- mostly cloudy with flurries, PM- partly cloudy; 0-.1 inch snow/ice cover; temp. -5 to 6°F; wind N 0-20 with gusts to 35 mph. Water mostly frozen; 3 observers in 3 parties plus 3 at feeders; 25 party hours (7.75 on foot, 17.25 by car) plus 4 at feeders, 1.5 owling; 243.3 party miles (8 on foot, 235.3 by car) plus 33.1 owling. Good details submitted for Greater Scaup, Rough-legged Hawk (present since mid-Nov.), Short-eared Owl (present since mid-Nov.), Lincoln's Sparrow, and Lapland Longspur (all by DS). 92 species, 5690 individuals. Lloyd Franks, Sheila Franks, Lois Johnson, Johnny Parks, Ned Piper, Damien Simbeck (compiler- Dept. of Zoology, University of Tennessee, Knoxville 37996-0810).

CROSS CREEKS NWR — 16 Dec; 0400-1700; partly cloudy; temp. 0-21°F; wind NW 5 mph; water mostly frozen; 8-9 observers in 4-5 parties plus 2-3 at feeders; 39.5 party hours (15.5 on foot, 24 by car) plus 8 at feeders, 3 owling; 283.5 party miles (16 on foot, 267.5 by car) plus 39 owling. The Golden Eagle was an immature (JD). Good details submitted for Oldsquaw (DM,JW). 94 species, 66731 individuals. Donald Blunk, Jerry Drewry, Bob English, Clayton Ferrell, Chip Grafe, Vicki Grafe, Carol Hale (compiler- Rt. 1, Box 556, Dover 37058), Stephen Hale, Dollyanne Myers, Jeff Wilson, Mike Wolf.

1989 CHRISTMAS BIRD COUNT

Species	MEMP	REEL	SAVA	CCWR	BUFF	CLAR	COLU	NASH	DRR	HICK	MURF	LEBA	HIGH	COOK	NICK	CHAT	HIWA	NORR	KNOX	GSMNP	GREE	KING	ELIZ	BRIS	ROAN
Common Loon	—	—	CW	—	—	—	—	—	—	34	—	—	2	—	1	16	—	—	1	—	—	—	—	3	—
Pied-billed Grebe	7	1	24	10	—	1	—	—	1	19	—	2	2	—	130	103	9	—	10	—	2	16	1	52	—
Horned Grebe	—	—	CW	—	—	—	—	—	—	40	—	2	120	—	3	20	5	—	4	—	—	—	—	—	—
Red-necked Grebe	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	3*	—	—	—	—	—	—	—	—	—
D.-cr. Cormorant	110	—	—	—	—	—	—	—	—	1	—	—	—	—	1	—	—	—	—	—	—	—	—	—	—
Great Blue Heron	14	43	CW	125	3	10	10	7	3	70	9	17	16	3	156	92	136	1	66	3	14	51	5	14	—
Bk.-cr. Night-Heron	—	—	—	—	—	—	—	—	—	10	—	—	—	—	—	—	—	—	8	—	—	22	—	—	—
Tundra Swan	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	2*	CW	1*	—	—	—	—	—	—
Mute Swan	—	—	—	—	2*	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Gr. Wh.-fr. Goose	—	3	—	—	—	—	3*	—	—	—	—	—	—	—	—	—	3	—	—	—	—	—	—	—	—
Snow Goose	—	9	1b	1s,4b	1b	—	15s,1b	—	—	12s,3b	—	—	3s,2b	2b	—	—	5b	—	—	—	4b	—	—	—	—
Canada Goose	865	150M	587	33.9M	1642	130	1470	67	32	959	606	483	2771	308	436	25	3513	140	615	7	360	314	85	185	—
Wood Duck	23	—	2	6	—	3	9	—	1	3	—	—	—	CW	7	5	6	—	—	1	37	—	4	—	—
Green-winged Teal	1	—	1	1000	—	—	7	—	—	—	—	—	—	—	—	1	108	—	—	—	—	1	—	1	—
Am. Black Duck	3	20M	21	8650	17	—	15	2	—	4	—	4	150	—	5	50	590	—	6	—	68	15	11	128	—
Mallard	711	430M	86	16.3M	119	51	259	24	2	383	41	4	1058	21	159	260	1671	11	191	11	567	512	77	382	—
Northern Pintail	—	1	—	150	—	—	1	—	—	1	—	—	1	—	1	—	135	—	—	—	—	—	—	—	—
Blue-winged Teal	6	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Northern Shoveler	8	2	CW	4	—	—	—	—	—	1	—	—	—	—	1	6	4	—	—	—	—	—	—	—	—
Gadwall	12	3	2	43	2	—	130	—	—	8	—	—	2	—	1341	80	344	—	19	—	—	10	—	—	—
American Wigeon	1	1	—	100	2	—	69	—	—	—	—	2	2	—	32	46	116	—	—	—	—	1	—	1	—
Canvasback	11	—	5	25	—	—	14	—	—	—	—	6	—	—	—	—	—	—	—	—	—	—	—	—	—
Redhead	—	3	1	1	—	—	—	—	—	CW	—	—	—	—	—	1	3	—	—	—	—	—	—	—	—
Ring-necked Duck	108	9	16	202	30	1	5	—	—	—	2	—	8	10	105	21	46	—	18	—	—	—	16	2	—
Greater Scaup	—	—	1*	—	—	—	—	—	—	—	—	—	—	—	37	90	3	—	—	—	—	—	—	—	—
Lesser Scaup	37	71	1	—	2	—	1	1	—	8	—	—	—	—	12	94	23	—	4	—	—	2	1	—	—
Oldsquaw	—	—	—	1*	—	—	—	—	—	1*	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
White-winged Scoter	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1*	—	—	—	—	—	—	—	—	—
Common Goldeneye	47	—	23	48	—	—	1	—	—	31	—	18	20	—	38	84	5	—	9	—	—	4	—	—	—
Bufflehead	—	—	1	15	—	—	—	—	—	20	—	—	23	—	64	22	—	—	6	—	—	7	94	2	—
Hooded Merganser	1	9	2	43	—	—	—	—	—	5	—	14	370	25	16	15	68	3	7	—	2	—	1	42	—
Common Merganser	—	1	—	—	—	—	—	—	—	—	—	—	—	—	2*	—	—	—	—	—	—	—	—	—	—
Red-br. Merganser	—	—	—	2	—	—	—	—	—	5	—	—	1	—	5	4	—	—	—	—	—	—	—	—	—
Ruddy Duck	7	5	—	—	—	—	—	—	—	—	—	—	—	—	96	3	2	—	—	—	—	1	—	—	—
Black Vulture	—	—	—	2	70	—	42	7	37	—	17	24	—	—	163	3	29	—	5	—	4	21	—	—	—
Turkey Vulture	—	—	1	—	145	—	2	4	—	—	—	2	1	13	—	13	22	—	1	1	10	1	—	—	—
Bald Eagle	—	11a,19i	1a,1i	6a,1i	—	—	—	—	—	—	—	1a	1a	—	1a	2a,2i	6a,4i	—	—	—	—	—	—	—	—
Northern Harrier	12	13	14	9	18	—	7	2	2	—	7	1	2	—	3	—	10	—	—	—	4	—	—	—	—
Sharp-shinned Hawk	4	2	1	1	2	—	1	2	1	1	1	—	1	2	1	1	1	—	—	—	—	1	2	—	—
Cooper's Hawk	4	—	—	3	1	—	1	3	2	1	—	2	—	—	2	6	3	1	2	—	5	—	3	2	—

Species	MEMP	REEL	SAVA	CCWR	BUFF	CLAR	COLU	NASH	DRR	HICK	MURF	LEBA	HIGH	COOK	NICK	CHAT	HIWA	NORR	KNOX	GSMNP	GREE	KING	ELIZ	BRIS	ROAN
Accipiter sp.	—	—	—	—	—	—	—	—	—	1	—	—	—	1	—	—	—	—	1	—	—	—	—	—	—
Red-shouldered Hawk	4	8	5	7	2	1	—	1	1	1	—	—	—	3	13	5	15	2	3	3	—	1	1	1	—
Red-tailed Hawk	71	28	8	33	51	8	19	21	34	12	30	15	13	11	13	25	34	4	11	7	9	9	5	5	2
Rough-legged Hawk	1	—	1*	—	—	—	CW	—	1	—	—	—	—	—	—	1*	—	—	—	—	—	CW*	—	—	—
Golden Eagle	—	—	—	1*	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
American Kestrel	19	19	4	5	42	17	14	19	15	25	63	13	39	27	18	10	10	4	17	9	30	39	5	17	—
Merlin	1*	—	—	—	—	—	—	—	—	1*	—	—	—	—	—	—	—	—	—	—	—	2*	—	—	—
Peregrine Falcon	1*	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1*	—	—	—	—	—	—	—	—	—
Ruffed Grouse	—	—	—	—	—	—	—	—	—	—	—	—	—	CW	—	—	—	—	—	12	—	—	1	2	CW
Wild Turkey	8	4	40	49	58	—	—	24	34	—	—	—	—	—	—	—	—	—	—	—	—	3	—	—	—
Northern Bobwhite	20	—	19	47	23	16	15	27	23	4	20	—	1	24	30	—	14	—	6	—	23	—	—	—	—
Black Rail	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1*	—	—	—	—	—
Sora	—	—	—	—	—	—	1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
American Coot	55	3	114	7	1	—	—	—	—	114	—	4	11	CW	10.6M	2344	2394	—	111	—	1	64	—	26	—
Sandhill Crane	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	50	—	—	—	—	—	—	—	—
Killdeer	62	8	4	9	6	1	3	15	9	14	13	11	6	13	75	91	73	7	96	3	1	23	17	3	—
Lesser Yellowlegs	2*	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Spotted Sandpiper	—	1*	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Least Sandpiper	19	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	3	—	—	—	—	—	—	—	—
Dunlin	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	5	—	—	—	—	—	—	—	—
Common Snipe	19	12	—	11	6	—	5	3	15	2	8	2	—	2	23	61	13	—	5	4	1	1	10	—	—
American Woodcock	—	—	—	1	1	—	—	—	—	1	—	—	—	—	1	1	1	—	—	—	—	—	—	—	—
Bonaparte's Gull	—	—	2	5	—	—	—	—	—	627	—	—	9	—	20	115	3	—	57	—	—	2	—	—	—
Ring-billed Gull	1160	3	550	530	—	—	—	—	—	5310	—	300	195	—	246	516	2173	—	402	—	—	4	—	2	—
Herring Gull	7	—	10	—	—	—	—	—	—	46	—	1	1	—	6	9	6	—	2	—	—	1	—	—	—
Gt. Black-backed Gull	—	—	—	—	—	—	—	—	—	1*	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Rock Dove	376	3	47	127	63	28	135	29	91	191	—	47	—	96	118	336	44	62	282	75	223	369	36	39	—
Mourning Dove	324	130	97	229	185	119	69	206	60	287	72	30	140	102	208	443	110	80	411	212	419	622	156	405	—
Common Barn-Owl	2	—	—	—	—	—	—	—	—	—	1	—	—	—	—	—	—	—	—	—	—	—	—	—	—
E. Screech-Owl	2	—	1	4	4	—	2	—	4	4	—	—	—	1	10	2	5	2	5	8	—	5	7	10	2
Great Horned Owl	1	—	1	1	10	2	6	2	2	3	4	—	—	—	7	5	4	—	2	—	2	6	3	23	—
Barred Owl	1	6	1	7	4	1	—	—	1	1	—	1	—	—	2	1	1	—	—	—	—	—	—	—	—
Short-eared Owl	—	—	1*	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Rufous Hummingbird	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1*	—	—	—	—	—	—	—	—	—
Belted Kingfisher	14	10	3	23	14	4	7	4	10	12	5	4	9	1	22	18	23	3	24	5	7	15	11	10	—
Red-hd. Woodpecker	10	16	1	2	14	—	3	2	1	—	—	—	1	—	3	3	2	—	—	—	—	—	—	—	—
Red-bel. Woodpecker	177	97	18	50	73	42	34	57	36	22	11	23	23	18	52	54	41	19	66	4	34	41	6	10	—
Yel.-bel. Sapsucker	37	34	5	12	9	2	11	21	29	5	4	3	7	2	34	34	14	4	18	3	6	3	12	1	—
Downy Woodpecker	68	56	12	31	39	34	41	62	26	31	13	18	6	23	85	34	25	23	67	32	40	24	24	12	1
Hairy Woodpecker	26	8	1	14	9	9	3	6	5	5	8	1	1	2	11	5	8	4	7	16	4	3	3	3	—

Species	MEMP	REEL	SAVA	CCWR	BUFF	CLAR	COLU	NASH	DRR	HICK	MURF	LEBA	HIGH	COOK	NICK	CHAT	HIWA	NORR	KNOX	GSMNP	GREE	KING	ELIZ	BRIS	ROAN
Northern Flicker	198	56	17	40	42	45	20	19	24	34	19	3	24	24	40	61	33	14	42	2	24	18	10	2	—
Pileated Woodpecker	30	16	6	10	25	15	7	8	5	4	1	1	1	7	30	11	15	5	18	28	7	9	7	13	2
Eastern Phoebe	2	1	2	12	2	—	—	—	3	—	1	—	—	1	7	3	20	3	7	12	8	2	4	3	—
Horned Lark	410	245	335	9	290	30	50	29	20	38	—	—	—	—	83	—	35	1	1	—	110	2	—	—	—
Blue Jay	391	50	9	119	129	154	63	173	142	156	51	60	118	161	161	194	183	155	281	59	122	314	90	122	17
American Crow	65	678	130	116	196	109	54	583	103	309	140	76	307	218	541	408	1322	202	410	206	648	403	421	341	14
Common Raven	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1	—	—	1	1	4
Carolina Chickadee	271	92	36	58	136	118	95	185	67	136	49	43	18	54	210	166	110	89	250	127*	127	137	48	57	5
Tufted Titmouse	131	44	17	63	115	123	66	133	49	59	34	33	41	62	154	138	75	52	133	65	78	119	33	24	3
Red-br. Nuthatch	2	—	—	3	5	2	—	1	—	1	1	—	—	1	1	6	—	1	3	5	1	—	4	2	11
White-br. Nuthatch	4	14	12	14	72	18	5	25	2	1	1	1	10	12	41	35	8	16	24	26	11	24	8	8	1
Brown-headed Nuthatch	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	24	6	—	—	—	—	—	—	—	—
Brown Creeper	15	4	2	4	9	1	1	5	5	7	3	—	—	9	13	7	7	1	11	17	2	1	5	—	2
Carolina Wren	141	54	12	35	44	45	23	41	36	84	25	14	10	53	143	77	55	66	131	64	67	59	41	51	6
Bewick's Wren	—	—	—	—	—	—	—	—	1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
House Wren	3	—	—	—	2*	—	—	—	—	—	—	—	—	—	—	1*	—	—	—	—	—	—	1*	—	—
Winter Wren	19	8	4	11	3	—	2	3	—	1	2	—	—	4	11	4	2	4	9	6	1	4	5	2	1
Marsh Wren	—	—	—	—	—	—	CW	—	—	—	—	—	—	—	—	—	1*	—	—	—	—	—	—	—	—
Golden-cr. Kinglet	66	12	22	49	40	1	1	24	5	27	5	7	10	18	116	83	102	59	107	154	36	37	50	18	7
Ruby-cr. Kinglet	28	9	18	12	9	4	—	CW	4	1	4	1	—	—	63	65	16	2	11	11	3	3	4	3	—
Eastern Bluebird	44	1	56	57	74	50	18	78	116	28	73	43	25	99	116	110	126	120	87	21	83	59	7	33	4
Hermit Thrush	22	14	14	27	19	4	9	10	33	7	—	2	2	10	23	23	24	5	13	5	—	3	7	2	—
American Robin	467	20	658	61	328	194	42	55	208	829	125	16	170	476	325	107	617	207	241	66	218	375	4	12	26
Northern Mockingbird	147	25	15	28	62	98	38	129	47	90	37	54	55	31	70	94	71	37	194	6	64	78	44	59	2
Brown Thrasher	20	7	5	5	10	9	2	7	2	1	—	1	4	1	21	38	22	2	6	1	5	1	1	—	—
American Pipit	14	—	—	17	1	—	—	1	—	—	—	1	—	—	2	3	1	10	12	—	—	—	—	—	—
Cedar Waxwing	37	—	103	91	25	46	58	16	16	61	1	—	—	112	316	299	287	74	123	—	71	62	—	44	40
Loggerhead Shrike	22	13	1	7	26	5	5	11	13	2	6	3	6	3	5	5	11	1	7	—	10	4	1	2	—
European Starling	1318	667	270	1157	868	1348	43	1987	1247	3403	500M	1532	943	5589	932	1067	5511	299	14.2M	162	2999	1707	334	818	21
Yellow-rumped Warbler	92	55	21	47	36	10	18	53	158	106	—	44	15	72	75	157	84	126	227	33	49	85	73	47	—
Pine Warbler	3	—	11	—	—	—	—	—	—	—	—	—	1	—	3	20	11	3	1	—	—	—	—	—	—
Palm Warbler	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1*	—	—	—
Common Yellowthroat	1*	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Northern Cardinal	813	535	253	303	192	446	141	421	129	287	178	89	96	123	332	379	127	84	346	108	123	206	124	82	8
Dickcissel	—	—	—	—	—	1*	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Rufous-sided Towhee	53	—	19	35	39	56	30	75	24	43	8	12	14	24	97	54	40	19	49	8	11	9	10	9	6
Am. Tree Sparrow	1	9	—	17	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Chipping Sparrow	—	—	7	—	—	3	—	—	—	—	—	6	—	—	7	19	1	—	—	1	1	—	—	—	—
Field Sparrow	151	61	33	44	169	27	108	62	82	99	22	25	49	29	276	149	111	46	88	22	27	51	1	29	—
Vesper Sparrow	—	—	2	—	—	—	—	—	—	—	1	—	—	—	1	—	4	—	—	—	—	—	—	—	—

Species	MEMP	REEL	SAVA	CCWR	BUFF	CLAR	COLU	NASH	DRR	HICK	MURF	LEBA	HIGH	COOK	NICK	CHAT	HIWA	NORR	KNOX	GSMNP	GREE	KING	ELIZ	BRIS	ROAN
Savannah Sparrow	162	3	156	34	182	—	10	7	—	—	—	12	—	1	333	20	34	—	1	—	8	—	—	—	—
LeConte's Sparrow	2	—	13	—	—	—	—	—	—	—	—	—	—	—	1*	—	—	—	—	—	—	—	—	—	—
Fox Sparrow	38	6	10	15	8	6	13	18	8	8	4	—	—	7	6	13	8	—	1	1	1	1	1	—	1
Song Sparrow	460	102	177	273	190	71	185	248	110	240	20	53	29	192	594	480	391	185	309	122	82	173	124	94	10
Lincoln's Sparrow	—	—	1*	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Swamp Sparrow	159	146	93	237	28	2	30	4	8	35	—	8	—	89	196	69	304	6	24	13	19	4	5	—	—
Wh.-throated Sparrow	1164	231	117	253	305	136	96	291	41	191	50	58	34	107	661	363	224	225	526	118	143	241	214	214	12
Wh.-crowned Sparrow	143	—	2	42	69	4	86	40	50	24	22	1	3	5	—	—	3	10	26	1	30	1	3	5	—
Harris' Sparrow	—	—	—	—	—	—	—	—	—	—	—	—	—	—	--	—	—	—	—	—	2*	—	—	—	—
Dark-eyed Junco	486	95	383	527	371	407	233	448	224	123	—	160	49	60	319	324	165	53	240	75	39	136	261	63	74
Lapland Longspur	CW	5	24*	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Smith's Longspur	CW	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Red-winged Blackbird	6166		625	459	8700	—	191	54	784	302	56	2	2	241	8662	23	297	—	47	2	—	200	—	—	—
Eastern Meadowlark	258	197	201	200	200	65	62	77	29	50	70	9	199	137	79	151	187	37	76	26	143	60	22	5	—
Western Meadowlark	CW	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Rusty Blackbird	482	19	73	17	7	—	27	3	—	143	10	2	—	—	81	53	1	—	1	—	1	—	5	—	—
Brewer's Blackbird	—	—	48	—	76	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Common Grackle	1577	7315	6	55	7538	138	33	99	2	171	5000	9	1536	21	4417	261	4	1	10M	—	1150	739	2	4	—
Brown-headed Cowbird	228	19	24	72	1120	11	7	464	135	207	62	—	1	CW	142	18	12	—	21	—	10	—	2	—	—
blackbird sp.	—	—	—	—	2450	1500	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Purple Finch	24	—	7	26	21	91	4	12	102	56	16	23	6	27	57	24	34	20	77	3	23	122	7	7	—
House Finch	56	13*	CW	18	22	354	302	225	40	176	244	233	38	555	68	252	23	66	245	16	618	112	29	209	—
Red Crossbill	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	8	—	—	—	—	30
White-winged Crossbill	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	20
Pine Siskin	9	5	17	49	2	19	108	151	57	17	45	3	2	64	7	178	6	34	305	412	363	200	132	409	12
American Goldfinch	60	62	207	114	151	173	51	157	36	97	15	36	24	78	184	143	119	83	259	120	110	201	49	74	6
Evening Grosbeak	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	7	—	—	—	6	50
House Sparrow	597	144	9	53	188	149	54	56	22	62	149	8	61	20	51	118	10	20	89	20	42	106	65	20	15
Total Species	**99**	**79**	**92**	**94**	**82**	**62**	**78**	**69**	**69**	**87**	**58**	**68**	**69**	**62**	**97**	**99**	**104**	**58**	**83**	**62**	**70**	**78**	**69**	**65**	**32**

M=1000 *= See information on the counts. Underlined numbers tie or exceed previous high counts.

BUFFALO RIVER — 28 Dec; 0400-1730; partly cloudy to clear; temp. 25-56°F; wind SW 0-5 mph; water mostly frozen; 11 observers in 5-6 parties. Good details submitted for Mute Swans (MW) and House Wrens (MB,DS). 82 species, 27266 individuals. Andy Augustin, Michael Beuerlein, Chester McConnell, Dot McConnell, Royce Neidert, Jane Newell, Dee Patterson, Donette Sellars, Damien Simbeck (co-compiler), Don Simbeck (co-compiler- 117 Second Ave. N, Loretto 38469), Morris Williams.

CLARKSVILLE — 30 Dec; 0700-1630; cloudy with AM fog and light rain; temp. 45-58°F; wind W 5-10 mph; water partly frozen; 10 observers in 5 parties plus 10 at feeders; 37.25 party hours (10 on foot, 27.25 by car) plus 9.5 at feeders, 1 owling; 293.6 party miles (10 on foot, 283.6 by car) plus 2 owling. Good details submitted for Dickcissel (AH). Gray Catbird (1) was reported, but no details were submitted. 61 species, 6,568 individuals. Mike Filson, Tom Foust, Debbie Gillis, Kenneth Haskins, Annie Heilman, Bill Hudson (compiler- 619 Idlewood Dr., Clarksville 37043), Gloria Milliken, Louise Podell, Ellen Walker.

COLUMBIA — 23 Dec; 0630-1700; clear to partly cloudy; temp. -11 to 13°F; wind AM- N 0-5 mph, PM- N 10-20 mph; water mostly frozen; 6 observers in 4 parties plus 4 at feeders; 26.5 party hours (8 on foot, 18.5 by car) plus 20 at feeders; 195 party miles (8 on foot, 187 by car). Good details submitted for Gr. White-fronted Geese (MM). 78 species, 4822 individuals. Nancy Byer, Brad Hammond, William Jernigan, Bedford Lochridge, Cleo Mayfield, George Mayfield (compiler- 999 Sunnyside Dr., Columbia 38401), Mark Mayfield, Jane Oakes, Karen Stephens, Charles Wolf.

NASHVILLE — 23 Dec; 0500-1700; clear; temp. -10 to 18°F; wind N 5-10 mph; water mostly frozen; 18 observers in 8 parties plus 6 at feeders; 61.75 party hours (26.5 on foot, 35.25 by car) plus 18 at feeders, 2.5 owling; 349.5 party miles (24.5 on foot, 325 by car) plus 5 owling. 69 species, 7106 individuals. Jeanne Cobb, Richard Conners, Kinian Cosner, William Cowart, Rowan DeBold, Gerald Drewry, Lucy Finch, Robert Hatcher, Mary Evelyn Jackson, Kenneth Lundstrom, Joseph McLaughlin, Robert O'Dear, Marjorie Patrick, Betty Pilzer, Virginia Price, Ann Tarbell (compiler-6033 Sherwood Dr., Nashville 37215), Julia Toone, Edwin Toone III, Edwin Toone IV, Oma Vaughn, David Vogt, Kenneth Walkup, Hardy Wilcoxon.

DUCK RIVER RESERVOIR — 16 Dec; 0400-1700; partly cloudy; temp. 10-20°F; wind W 0-10 mph; water mostly frozen; 6 observers in 5 parties; 33 party hours (16 on foot, 17 by car) plus 2.5 owling; 212 party miles (10 on foot, 202 by car) plus 2 owling. 69 species, 4667 individuals. Brad Hammond, Bill Jernigan, Alyn Lay, George Mayfield, Allen Pressnell (compiler-Rt. 6 Box 274G, Columbia 38401), Dianne Pressnell.

HICKORY-PRIEST — 1 Jan; 0500-1730; cloudy to mostly cloudy; temp. 31-44°F; wind W 8 mph; water partly frozen; 16 observers in 6 parties; 53 party hours (28.5 on foot, 24.5 by car) plus 3.5 owling; 376 party miles (20 on foot, 356 by car) plus 20 owling. Good details submitted for Oldsquaw (DJ,KJ,JP), Merlin (BC,JM,JS) present since fall, third year at this site, and Great Black-backed Gull (BC,JD,DJ,KJ,JP,JS) present for several days before count. 87 species, 16,156 individuals. Frances Abernathy, Linda Anderson, Hazel Cassell, Bill Cowart, Jerry Drewry (compiler-4444 Dowdy Dr., Antioch 37013), Louise Jackson, Dan Jacobson, Kathy Jacobson, Lee Kramer, Joe McLaughlin, Deane McGork, Johnny Parks, Chris Sloan, Ann Tarbell, David Vogt.

MURFREESBORO — 6 Jan; 0800-2200 [?-DJS]; cloudy to mostly cloudy; temp. 45-59°F; wind NW 6 mph; water open; 12 observers in 6 parties; 32 party hours (2 on foot, 30 by car) plus 1 owling; 173 party miles (3 on foot, 170 by car). 58 species, 507,447 individuals. Bertha Chrietzberg, James Chrietzberg, Bill Erwin, Lou Erwin, Ann Hettish (compiler-1018 Lawndale Dr., Murfreesboro 37129), Bob Hettish, Richard Hunter, Wilma Hunter, David McCarroll, Larry McFarlin, John Patten, Terry Witt.

LEBANON — 16 Dec; 0630-1630; clear to partly cloudy, with AM snow showers; temp. 0-25°F; wind NW 3-8 mph; water partly frozen; 9 observers in 4 parties plus 2 at feeders; 29.25 party hours (8 on foot, 21.25 by car) plus 5 at feeders; 209.75 party miles (13.25 on foot, 196.5 by car). 68 species, 3740 individuals. Norma Crawford, Mildred Gaston, June Gelpi, Ruth McMillan (compiler-Rt. 2 Box 141, Lascassas 37085), Kay Norris, Larry Norris, Becky Roy, Howard See, Ramona See, Barbara Stedman, Melissa Tucker.

HIGHLAND RIM — 30 Dec; 0700-1600; cloudy with fog and rain; temp. 53-59; wind AM- S 10 mph, PM- NW 10 mph; water mostly frozen; 16 observers in 8 parties; 32 party hours (5.25 on foot, 26.75 by car); 367.5 party miles (8.5 on foot, 359 by car). 69 species, 8621 individuals. Donald Davidson (compiler-1703 Second Ave., Manchester 37355), Marguerite Hernandez, Ruth Luckado, Nicky Medley, Dianne Nunly, Chloe Peebles, Howell Peebles, Erma Rogers, Mary Shelton, Quincy Stykes, Jean Sullivan, Lillie Willard, Grady York, Willa York.

PUTNAM COUNTY — 2 Jan; 0700-1650; partly cloudy; temp. 18-48°F; wind SE 0-15 mph; water partly frozen; 8 observers in 5 parties plus 1 at feeders; 38 party hours (15.5 on foot, 22.5 by car) plus 1 at feeders; 257 party miles (7.25 on foot, 249.75 by car). 62 species, 9447 individuals. Jean Cashion, Michelle Cashion, Richard Cashion, Graham Kash, Mildred Lassiter, Richard Simmers (compiler-Rt. 6 Box 170, Cookeville 38501), Barbara Stedman, Steve Stedman, Joseph Wahl.

NICKAJACK LAKE — 30 Dec; 0500-1730; cloudy with light rain; temp. 46-57°F; wind SE 0-5 mph; water partly frozen; 19 observers in 9-10 parties; 78 party hours (46.25 on foot, 27.75 by car, 4 by boat) plus 5.5 owling; 340 party miles (26 on foot, 285 by car, 29 by boat) plus 61 owling. Good details submitted for Common Merganser (CSW) and LeConte's Sparrow (JD,CSl). 97 species, 34,492 individuals. Clyde Blum, Jerry Drewry, Paul Harris, John Henderson, Caryl Hogsett, Jerry Ingles, Daniel Jacobson, Kathy Jacobson, Albert Jenkins, Starr Klein, Laraine McCay, Johnny Parks (compiler-1610 E. 17th St., Chattanooga 37404-5003), Peter Robinson, Tommie Rogers, Robin Rudd, Chris Sloan, Joe Stone, Carl Swafford, Bruce Wilkey.

CHATTANOOGA — 16 Dec; 0700-1800; clear; temp. 8-27°F; wind NE 5-20 mph; water partly frozen; 35 observers in 13 parties plus 4 at feeders; 110 party hours (70 on foot, 40 by car) plus 14 at feeders, 8 owling; 591 party miles (70 on foot, 521 by car) plus 57 owling. Good details submitted for Red-necked Grebe (LD,DR), White-winged Scoter (LD,LH,DR) (adult male), Rough-legged Hawk (AJ) (dark morph), Peregrine Falcoln (DR), Rufous Hummingbird (EH,JH) (adult male, present since fall. Probably same bird as last year.), and House Wren (JH,KH,SH,DJ). Marsh Wren (1) reported without details. 99 species, 11482 individuals. Nelson Bennett, Bob Campbell, Bob Clark, Cob Crawford, Ken Dubke, Lil Dubke, Edgar Grundset, Linda Harris, Paul Harris, John Henderson (compiler-7323 Fairington Circle, Hixon 37343), Ken Hereford, Sandra Hereford,

Ella Howard, J.N. Howard, Dan Jacobson, Al Jenkins, Lenny Kafka, Bill Lane, Polly Lane, Jonnie Sue Lyons, John McClure, Evelyn McKinney, Barbara McMahan, Mike McMahan, Tom Patton, Bob Pierce, Mary Ann Potter, Don Ritzhaupt, Charles Robertson, Peter Robinson, Tommie Rogers, Robin Rudd, Donald Rush, Bernie Tompkins, Dan Williams, Dick Wodenski.

HIWASSEE — 1 Jan; 0530-1800; partly cloudy to clear; temp. 34-43°F; wind NW 5-10 mph; water open; 15 observers in 7 parties; 75.5 party hours (45 on foot, 26.5 by car, 4 by boat) plus 7 owling; 341 party miles (40 on foot, 277 by car, 24 by boat) plus 26 owling. Good details submitted for Tundra Swan (EB,CB,LD,TR,DR), and Marsh Wren (CB,RK). 104 species, 22,838 individuals. Mark Armstrong, Clyde Blum, Edith Bromley, Carl Campbell, Andrew Core, Richard Diener, Ken Dubke, Lil Dubke, Lenny Kafka, Rick Knight, Chris Norris, Tommie Rogers, Donnie Rush, Robin Rudd, Boyd Sharp.

NORRIS — 31 Dec; 0630-1830; cloudy; temp. 42-48°F; wind light, variable; water partly frozen; 6 observers in 4 parties; 21 party hours (12 on foot, 9 by car) plus 0.5 at feeders, 1.5 owling; 126 party miles (11 on foot, 115 by car) plus 10 owling. 58 species, 2,813 individuals. Richard Clark, Linda Fowler, Audrey Hoff, Ron Hoff, George McKinney, Charles Nicholson (compiler-Box 402, Norris 37828).

KNOXVILLE — 17 Dec; 0600-1730; cloudy; temp. 8-28°F; wind SW 0-5 mph; water mostly frozen; 21 observers in 13 parties plus 4 at feeders; 71.8 party hours (43.3 on foot, 28.5 by car) plus 4.5 at feeders, 2.5 owling; 357.8 party miles (38 on foot, 319.8 by car) plus 17.2 owling. Good details submitted for Tundra Swan (CN). 83 species, 31,854 individuals. Jane Beintema, Chris Butler, Bob Collier, Lara Collier, Andrew Core, Marcia Davis, Louise Fuller, Audrey Hoff (compiler-4523 McCloud Rd., Knoxville 37938), Ronald Hoff, Andrew Howe, Tom Howe, Kate Johnston, Tony Koella, Bettie Mason, James Mason, Charles Nicholson, Holly Overton, Mark Reeves, Dan Robbins, Boyd Sharp.

GREAT SMOKY MOUNTAINS NATIONAL PARK TN-NC — 30 Dec; 0430-1800; cloudy with light rain; temp. 25-62°F; wind 0-5 mph, variable, up to 25 mph at higher elevations; water open; 19 observers in 10 parties; 72.25 party hours (43.5 on foot, 28.75 by car) plus 3 owling; 269.75 party miles (58.25 on foot, 211.5 by car) plus 39 owling. Poor details submitted for Black Rail (BSh). 62 species, 2,577 individuals. Mark Armstrong, Jane Beintema, Howard Chitwood, Robert Collier, Jr., Marcia Davis, Donald DeFoe (non-participating compiler-Great Smoky Mountains National Park, Gatlinburg, TN 37738) Paul Hartigan, Audrey Hoff, Susan Hoyle, Burt Jones, Charles Nicholson, Chris Norris, Holly Overton, Truett Patterson, Karen Petrey, Mark Reeves, Martha Rudolph, Michael Ryon, Beth Schilling, Boyd Sharp.

GREENEVILLE — 6 Jan; 0500-1745; cloudy with 0.3 inches of rain in morning; temp. 46-50°F; wind calm; water open; 23 observers in 12 parties plus 3 at feeders; 51.5 party hours (16.5 on foot, 32 by car) plus 26.5 at feeders, 2 owling; 333.5 party miles (10 on foot, 320.5 by car, 3 by boat) plus 1 owling. Good details submitted for Harris' Sparrow (RN, HW). 70 species, 9,567 individuals. Ben Britton, Orland Britton, Phine Britton, Justino Carlos, Cynthia Cragin, Herb Cragin, Marjorie Earnest, Barbara Fallon, King Gaut, Margaret Gaut, Juanita Heckert, Lenard Heckert, Barbara Holt, Don Holt (compiler-311 Colonial Circle, Greeneville 37743), Henrietta Holt, Daniel J. Nieves, Dick Nevius, Willie Ruth Nevius, Doug Ratledge, Helen Reed, JoAnne Routledge, Larry Routledge, Helen Spees, Royal Spees, Virginia Williams.

KINGSPORT — 30 Dec; 0800-1600; cloudy with occasional light drizzle; temp. 32-40°F; wind 0-3 variable; water partly frozen; 20 observers in 6 parties plus 3 at feeders; 47 party hours (12.5 on foot, 34.5 by car) plus 24 at feeders, 3 owling; 330.5 party miles (7.5 on foot, 323 by car) plus 35 owling. Good details submitted for Merlin and Palm Warbler (both by GL and SL). Tufted Duck (1) deleted; details did not eliminate scaup. 78 species, 8,286 individuals. Frank Altom, Danny Blakley, Doris Gilland, Jim Gilland, Bob Hale, Wynn Heckert, Marie Jackson, Rick Knight, George Livkins, Suzanne Livkins, Danny Mumford, Betty Ottenfeld, Ben Quillen, Emily Sikora, Arthur Smith (compiler-100 Otari Dr., Kingsport 37664), Julie Smith, Ken Smith, Frank Williams, Kristin Zimet.

ELIZABETHTON — 22 Dec; 0530-1730; clear to partly cloudy; temp. -3-8°F; wind 0-10 mph N; water partly frozen; 8 observers in 3 parties; 29.75 party hours (12.75 on foot, 17 by car) plus 2.25 owling; 232.5 party miles (8.5 on foot, 224 by car) plus 13 owling. Good details submitted for House Wren (DL, GW, FW). 69 species, 2,856 individuals. Fred Alsop, Brian Cross, Dan Huffine, Rick Knight (compiler-804 N. Hills Dr., Johnson City 37604), Dick Lura, Tom McNeil, Gary Wallace, Frank Ward.

BRISTOL — 30 Dec; 0730-1700; cloudy; temp. 36-46°F; wind calm; water partly frozen; 8 observers in 3 parties; 27 party hours (13 on foot, 14 by car) plus 3 owling; 247 party miles (5 on foot, 242 by car) plus 26 owling. 65 species, 4,377 individuals. Jim Boyd, Mary Boyd, Wallace Coffey, Brian Cross, Bert Hale, Ken Hale, Loraine Hale, Richard Lewis (compiler-407 V.I. Ranch Road, Bristol 37620).

ROAN MOUNTAIN — 29 Dec; 0700-1630; partly cloudy, 3-5" snow on ground; 15-38°F; wind 0-18 mph S; water mostly frozen; 2 observers in 1-2 parties; 10 party hours (7 on foot, 3 by car) plus 0.25 owling; 43 party miles (6 on foot, 37 by car) plus 2 owling. Good details submitted for White-winged Crossbills (BC). 32 species, 415 individuals. Brian Cross, Rick Knight (compiler-804 N. Hills Dr., Johnson City, TN 37604).

The Migrant, 61(1):10-11, 1990

RECENT RECORDS OF WOOD STORKS IN KNOX COUNTY, TENNESSEE

Charles P. Nicholson
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On 11 September 1983, Don Powers observed a Wood Stork (*Mycteria americana*) soaring over Pellissippi Parkway (TN 162) in west Knox County, Tennessee. Powers reported his observation to J. B. Owen, Knoxville TOS member and author of a nature column in *The Knoxville News-Sentinel*. The next observation of a stork was on 17 September 1983, when A. Boyd Sharp observed one, presumably the same bird Powers saw, at a pond near the junction of I-40 and Pellissippi Parkway and about 3 km SE of the site of Powers' observation. This bird, an immature, remained in the area until at least 7 October, and was seen and photographed by many observers from across the state.

This stork was usually found in one of five fairly shallow, naturally occurring ponds near the junction of I-40 and Pelissippi Parkway. Two of these ponds are surrounded by woods, while the others are more open. Two are visible from heavily-traveled highways, and the largest, Dead Horse Lake, is adjacent to a golf course. On the afternoon of 17 September, I watched the stork for about 1.5 hours as it fed in one of the small ponds surrounded by woods. The water in this pond was low and turbid, and the stork fed in water about 10-25 cm deep. It walked slowly through the water dragging its beak back and forth in the water. It often stretched one wing, presumably to shade the water, stirred the water with one foot, and then jabbed at prey. During the course of my observation, I saw it swallow at least 7 fish, which appeared to be bullheads (*Ictalurus* sp.) up to 15 cm long. The stork appeared to have little trouble catching prey.

After J. B. Owen wrote about the Wood Stork in his newspaper column, Mr. and Mrs. C. R. Rickard reported to him that a Wood Stork visited a pond in their yard during the fall of 1974. This was along Tazewell Pike in north Knox County. The Rickards photographed this stork, and Owen and I have examined the photos. As with the 1983 bird, the Rickard's bird was an immature. The pond it visited is surrounded by pasture, and tame Mute Swans (*Cygnus olor*) and ducks were present.

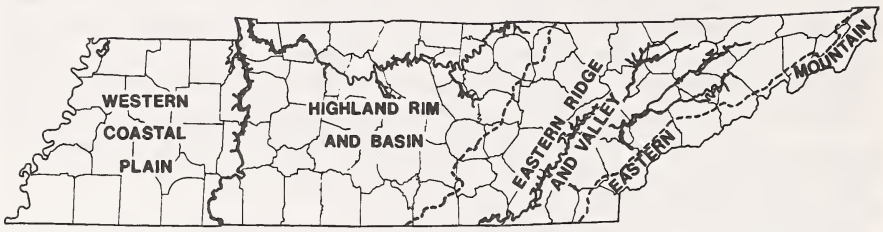
These are the second and third Knox County records of a Wood Stork. The previous record is of a bird shot on 16 April 1937 at Cedar Bluff, just east of Dead Horse Lake (Walker, Migrant 7:41, 1937). According to Walker (op. cit.), a Wood Stork had been present at Lake Andrew Jackson (now known as Dead Horse Lake) a few days before the bird was shot at Cedar Bluff. Other previous East Tennessee records include a flock of 5 (1 shot) at Cumberland Gap, Claiborne County, on 13 June 1932 (Ogden, Migrant 4:50-51, 1933), and 2 adults killed near Chattanooga in June 1966 (DeVore, *Migrant* 37:82-83, 1966).

Accepted February 1990.

The Migrant, 61(1):12-22, 1990.

THE SEASON

Robert P. Ford, Editor



FALL: 1 AUGUST — 30 NOVEMBER 1989

Hurricane Hugo ravaged the shores of South Carolina in mid-September, but transformed Tennessee's Eastern Mountain Region into a coastal paradise for birders. Petrels, jaegers, terns, and gulls occurred on Watagua Lake as Hugo continued inland, leaving the lake, region, and state with an assortment of firsts. Read the Eastern Mountain Region report for details as to species. Hugo apparently did not affect bird distribution in the remainder of the state. Relatively average temperatures, but a wetter than normal fall, occurred across the state during the period.

Shorebird migration was closely followed by observers this fall, especially in the Memphis area. Wet conditions provided pools of water in otherwise dry environs, resulting in shorebird records from some new places. Birders are encouraged to take special note of these areas; they often attract a variety of birds. Traditional birding areas furnished their usual share of rarities. Highlights included American Avocet and Ruff in southwest Shelby County.

Two banding stations reported low success rates during the period, especially during the month of September. Across the state, species of warblers occurred much as expected, but in lower than usual numbers. Warbler numbers are apparently declining, and careful observation and listing will become more and more important. Observers may consider taking special notes on occurrence and habitat utilization when neotropical migrants are found. Much time was spent afield this season, and it shows in the variety of records presented here. Read on for more!

Abbreviations used in the following report include: ad-adult; b-banded; Co.-county; EOP-end of period; ers-earliest reported sighting; et al.-and others; fide-reported by; im-immature; in-inch; lrs-latest reported sighting; max-maximum 1 day count in 1 county; m. ob -many observers; ph-photograph; yg-young; * -record has been documented.

WESTERN COASTAL PLAIN — Some interesting transients highlighted the 1989 Fall Season, thanks to the Mississippi River and the T.J. Maxson Sewage Lagoons. White Pelicans occurred at Island 13, and an American Avocet and Ruff were observed at the sewage lagoons in southwest Shelby County. Many other species of shorebirds were observed at the lagoons throughout the entire season. No extraordinary climatic conditions affected the arrival and departure of the many transients that pass through west Tennessee.

Pelican–Rail: WHITE PELICAN: 18 Sep (40) Is 13 (WGC). Double-crested Cormorant: 6 Sep-20 Nov (1-1000+) LKC (WGC); 1 Oct (53) PAP (DWB); 29 Oct (373) SFP (JRW). Least Bittern: 17 Sep (1) Hooper Marsh, DYC (WGC). Greater White-fronted Goose: 12-13 Oct (65+) Is 13 (WGC). Northern Pintail: 13/26 Oct (33/70) Is 13 (WGC). OLDSQUAW: 5 Nov (1) BRF (DWB), details submitted. Surf Scoter: 8/29 Oct (1/2), 5 Nov (5) PLS (DWB). White-winged Scoter: 29 Oct (1) PLS (DWB). Hooded Merganser: 9/26 Nov (3/5) Is 13 (WGC). Red-breasted Merganser: 18 Nov (17) Is 13 (WGC). Osprey: 16/25 Sep (2), 2/4 Oct (1) Is 13(WGC); 23 Sep (2) Savannah Bottoms, HDC (DJS); 1 Oct (1) north central DTC (CHB); 27 Aug-1 Oct (1/2) PAP (DWB). Bald Eagle: 7/8/15 Aug (1 ad) Macon, TIP (JerryMitchell), previous sighting of a Bald Eagle in the same area was made in Jun and Jul; 22/27 Sep (1 ad, 1 im) Is 13; (2 ad) REL, LKC (WGC). Northern Harrier: 23 Sep-EOP (1-9) Savannah Bottoms, HDC (DJS). Sharp-shinned Hawk: 21 Oct (1) Is 13 (WGC); 29 Oct (1) SFP (JRW). Cooper's Hawk: 27 Sep (1) Is 13 (WGC); 29 Oct (1) SFP (GRP, BHW). Broad-winged Hawk: 21 Sep (20) MEM (JLL). Rough-legged Hawk: 24 Nov-EOP (1) Savannah Bottoms, HDC (DJS), details submitted. Merlin: 16 Sep (1) ESL (CHB, MGW); 23 Sep (1) Savannah Bottoms near Shiloh, HDC (DJS); 8 Oct (1) ESL (DWB). Peregrine Falcon: 23 Sep (1) ESL (MGW). King Rail: 1 Oct BSU (DWB). Virginia Rail: 24 Sep (1 ad, dead) Is 13 (WGC); 1 Oct (1) BSU (DWB). Sora: 2 Sep-1 Oct (1-3) BSU (DWB).

Plover–Tern: Shorebirds in Dyer, Lake, and Shelby counties received much attention this season. Field work in Dyer and Lake counties averaged three visits a week while Shelby county visits were limited to twice a week. Records indicate high and low numbers for the period. Black-bellied Plover: 5-6 Aug (1) ESL (Dick Whittington); 28 Aug (2) Is 13 (WGC); 1/8 Oct (7/12) BSU (DWB); 1 Oct (3) ESL (MLG); 5 Oct/24 Nov (5/1) ESL (DPB, CHB, VBR, JEW, MGW). Lesser Golden Plover: 24 Nov (1) Savannah Bottoms, HDC (DJS), details submitted. Semipalmated Plover: 8-16 Sep (2-15) Is 13, 4 Oct (1) Tiptonville, LKC (WGC); 9 Aug-4 Nov (1-13) ESL (MGW, JEW, VBR, WRP, CHB, DPB). Piping Plover: 8-30 Aug (1) Is 13 (WGC). Black-necked Stilt: 9 Aug (1) Wolf River, near Moscow, FYC (Knox Martin), first reported for FYC; 28 Sep (2) ESL (MGW); 1 Oct (1) ESL (MLG). AMERICAN AVOCET: 6 Sep (1) Is 13 (WGC); 28 Sep (1) ESL (CHB, LCC). Lesser Yellowlegs: 27 Aug (20) Heloise, DYC (WGC); 23 Sep (310+) ESL (Memphis Audubon); 28 Sep (300) ESL (CHB, LCC); 12 Oct (328) ESL (MGW, JEW, VBR, WRP, CHB, DPB); 24 Nov-EOP (2-5) ESL (MGW, JEW). Solitary Sandpiper: 12 Aug (5) Is 13 (WGC); 9 Aug-18 Sep (1-6) ESL (DPB, CHB, VBR, WRP, JEW, MGW). Upland Sandpiper: 3 Sep (1) levee at Is 13 (DWB). Ruddy Turnstone: 18/23/25 Aug (1), 16 Sep (3) Is 13 (WGC); 2/12 Sep (1/2) ESL (MTOS). Sanderling: 23-27 Aug (1), 1-23 Oct (1-9) Is 13 (WGC); 9 Sep (1) PAP (DWB); 10/12 Sep (1) ESL (Theresa Irion, MRR, JEW, MGW). Western Sandpiper: 18/28 Aug/1 Oct, 18 Nov (1) Is 13 (WGC); 27 Aug (10-12) PAP (Joyce North); 9 Aug-27 Sep (2-7) ESL (MGW, JEW, VBR, CHB, DPB). Least Sandpiper: 9 Aug-EOP (1-953) ESL (MGW, JEW, WRP, VBR, CHB, DPB). Baird's Sandpiper: 27 Aug (1) PAP (DWB); 3 Sep (16) Is 13 (DWB); 4/5 Sep (5/4), 20 Nov (1) Is 13 (WGC); 12 Sep (1) ESL (JEW, MGW); 1 Oct (1) ESL (MLG); 8 Oct (1) ESL (DWB). Pectoral Sandpiper: 8 Aug-8 Sep (1-150) Is 13 (WGC); 9 Aug-4 Nov (14-888) ESL (DPB, CHB, WRP, VBR, JEW, MGW). Dunlin: 21 Oct-20 Nov (3-13) Is 13 (WGC); 22 Oct-EOP (5-69) ESL (DPB, CHB, VBR, JEW, MGW). Stilt Sandpiper: 14-28 Aug

(1-9) Is 13, 27 Aug (15) Heloise, DYC, 4 Sep (32) Lake #9, LKC, 2 Oct (1) Tiptonville (WGC); 9 Aug (1), 2-18 Sep (2), 1 Oct (65+), 29 Oct (5) ESL (GBB, Ivon Beaver, DPB, CHB, MLG, VBR, JEW, JRW, MGW). Buff-breasted Sandpiper: 25 Aug-8 Sep (3-21) Is 13 (WGC); 2 Sep (1) ESL (MTOS). RUFF: 27 Sep-12 Oct (1) ESL (*MGW, m. ob.), details submitted. Dowitcher species: 14-30 Aug/4 Oct (1-9) Is 13 (WGC); 27 Aug (2) PAP (Joyce North); 2 Sep-28 Sep (1-3) ESL (MGW, JEW, VBR, CHB, DPB). Short-billed Dowitcher: 1 Oct (1) ESL (MLG); 12 Oct (7) ESL (MGW, JEW). Long-billed Dowitcher: 1 Oct (1) ESL (MLG); 12 Oct (2) ESL (MGW, JEW). Wilson's Phalarope: 18-28 Aug (1-3) Is 13 (WGC); 27 Aug (1) PAP (Joyce North); 2/23 Sep (2), 4/24 Nov (1) ESL (MTOS). Red-necked Phalarope: 1 Oct (1) PAP (DWB, JRW), details submitted. Franklin's Gull: 1 Oct (1) PAP (DWB); 11 Nov (1) Pickwick State Park, HDC (DJS); 13 Nov (1) Is 13 (WGC). Ring-billed Gull: 2 Sep (2) PAP (DWB); 30 Oct-EOP (3/1000) Is 13 (WGC). Herring Gull: 1 Oct (1) PAP (DWB); 30 Oct-EOP (1-2) Is 13 (WGC). Caspian Tern: 12 Aug-27 Sep (1-2), 1-10 Oct (15-2) Is 13 (WGC); 27 Aug (8), 2 Sep (11), 1 Oct (5) PAP (DWB). Common Tern: 27 Aug (1) PAP (Joyce North, DWB); 1 Oct (2) PAP (DWB). Forster's Tern: 25 Aug (3), 6 Oct (2) Is 13 (WGC); 2 Sep/11 Nov (3) PLS (DWB). Black Tern: 14-25 Aug (1-88) Is 13 (WGC); 27 Aug (12) PAP (Joyce North); 23 Sep (14) Pickwick Lake at Dry Creek, HDC (DJS).

Dove–Siskin: COMMON GROUND DOVE: 27 Aug (1) BRF (DWB), details submitted. Barn Owl: 3 Sep (1) Hwy 54 near Como, HYC (DWB). Short-eared Owl: 5 Nov (1) BRF (DWB); 11 Nov-EOP (1) Savannah Bottoms at Hatley Rd., HDC (DJS). Common Nighthawk: 21 Aug-5 Sep (1-120) MEM (LCC, Martha Heinemann); 3 Sep (30) MEM (Bill Fowler); 28 Sep (18) PEF (JLL, Dwight Miller); 1 Oct (45) MEM (JEW); 21 Oct (49) Tatumville, Forked Deer River Bottoms (WGC). Swallow species: 8/21 Aug (1000/2500), 25 Sep (2000), Is 13 (WGC), species were a mix of Bank and Cliff. Olive-sided Flycatcher: 28 Aug (1) PEF (VBR); 1 Oct (1) northcentral DTC (CHB); 2 Sep (1) BRF (DWB). Yellow-bellied Flycatcher: 23 Sep (1) Dry Creek, HDC (DJS), details submitted, identified by call. Veery: 23 Sep (1) Savannah Bottoms, HDC (DJS). Gray-cheeked Thrush: 23 Sep (2) Savannah Bottoms, HDC (DJS). Swainson's Thrush: 23 Sep (1) Savannah Bottoms, HDC (DJS). Water Pipit: 11 Nov-EOP (1-3) Savannah Bottoms, HDC (DJS). Warblers were detected on weekly trips to bottomland hardwood forests. It was an early migration for expected species, but all numbers were lower than normal. Eighteen species were observed in HDC in lower single digit numbers. Fall Field Day, 29 Oct, eight species were observed. Worm-eating Warbler: 25 Oct (1) PEF (MGW), late for season. Dickcissel: 29 Oct (1) PEF (CHB, Theresa Irion, NMS). Lark Sparrow: 3 Sep levee, LKC (DWB). Grasshopper Sparrow: 1 Aug-23 Sep (2-12) Savannah Bottoms, HDC (DJS). Le Conte's Sparrow: 11 Nov-EOP (6) Savannah Bottoms, HDC (DJS); 27 Nov-EOP (2) PEF (MLG); Nov (4) PEF (JRW, GBB). Sharp-tailed Sparrow: Nov (1) PEF (JRW, GBB), details submitted. Lincoln's Sparrow: 8 Oct (1) Savannah Bottoms, HDC (DJS), details submitted. White-crowned Sparrow: 10 Oct (11) Trenton, GBC (MAG); 19 Nov-EOP (35) PEF (MGW). Lapland Longspur: 4 Dec (35) PEF (MLG). Smith's Longspur: 25 Nov (8) PEF (MLG, MGW), 6 Dec (5) PEF (JLL, Dwight Miller). Western Meadowlark: 25 Nov (1) PEF (MLG, MGW). Rusty Blackbird: 25 Nov (25) PEF (MGW); 29 Nov (6) LHW (HBD, CHB, VBR, BHW). Brewer's Blackbird: 24 Nov (4) Savannah Bottoms, HDC (DJS), second county record; 25 Nov (6) PEF (MLG).

House Finch: 26 Nov (52) Trenton, GBC (MAG). Pine Siskin: 11 Nov-EOP (1) Pickwick State Park (DJS); 15 Nov (1) Trenton, GBC (MAG).

Location: BRF-Britton Ford, Tennessee National Wildlfe Refuge, Henry Co.; BSU-Big Sandy Unit, Tennessee National Wildlife Refuge, Henry Co.; DTC-Decatur Co.; DYC-Dyer Co.; ESL-Ensley Sewage Lagoons, Shelby Co.; FYC-Fayette Co.; HDC-Hardin Co.; HYC-Haywood Co.; Is 13-Island 13, Lake Co.; LHWR-Lower Hatchie National Wildlife Refuge; LKC-Lake Co.; MEM-Memphis; PAP-Pace Point, Benton Co.; PEF-Penal Farm, Shelby Co.; PLS-Paris Landing State Park; REL-Reelfoot Lake; SFP-Shelby Forest State Park, Shelby Co.

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HIGHLAND RIM AND BASIN REGION — The weather in Nashville during the period was characterized by near average temperatures and by higher than average rainfall for every month of the period. Sep was particularly wet, almost twice the average rainfall occurred. The high rainfall resulted in shallow, wet-weather ponds that attracted good shorebird numbers to some parts of the region.

The seed crop was generally reported to be fairly good though the Hackberry crop was poor.

Among the most noteworhty of reports for the period was a Red-throated Loon at Woods Reservoir, a Laughing Gull also at Woods Reservoir, and a Franklin's Gull on Old Hickory Lake. Pine Siskins were reported from several locations which may indicate a good season for this invasion species for the oncoming winter.

Loon–Merganser: RED-THROATED LOON: 6 Nov (1) WDR (RWL, MDH). Double-crested Cormorant: 2 Oct (1) PPL, RUC (Anne L. Hettish), ers; 7 Oct (40) OHL, Wilson Co. (RVM), max.; 3 Nov (30) WDR (RWL). Cattle Egret: 1 Oct (2) Dilton-Mankin Rd., RUC (Wilma Hunter), only report. Yellow-crowned Night Heron: 21 Aug (4) Tullahoma, FKC (Majory B. Harper), lrs. White-fronted Goose: 4 Nov (1) Monsanto Ponds, MUC (OBL), ers; 24 Nov (1) WDR (DLD). Snow Goose (blue morph): 10 Nov (3) Hillsboro, CFC (ELR), only report. Canvasback: 23 Oct (2) AEDC, CFC (DLD), ers. Common Goldeneye: 8 Nov (8) RDL (MLM),ers. SURF SCOTER: 23 Nov (1) WDR (DLD). Hooded Merganser: 8 Nov (250) AEDC (DLD), max.

Osprey–Crane: Osprey: 22 Aug (1) AEDC (DLD), 7 Oct (1) Camp Boxwell, OHL, Wilson Co. (RVM, Jo Rook, June Gelpi, Darrell Ramsey). Bald Eagle: Sep (1 ad) Murfreesboro, RUC (Richard Hunter, Wilma Hunter), seen feeding on dead cow 2 days in Sep; 18 Sep (1 ad) AEDC (DLD); 21 Sep (1 ad) Normandy Res., CFC (James F. Van Cleave); 3 Nov (1 im) WDR (DLD); 25 Nov (1 im) Goose Pond, Grundy Co. (F. Nicky Medley). Merlin: 27 Sep (1) Monteagle, FKC (RWL). Wild Turkey: 9 Sep (10-12 im) WDR (Lillie D. Wilard, Marjory B. Harper); 29 Oct (18) CCNWR, SWC (Nita R. Heilman), max. Sandhill Crane: 4 Nov (1) Goose Pond, Grundy Co. (Violette S. Wakeland); 10 Nov (20) Hillsboro, CFC (FNM), max.

Plover–Tern: Black-bellied Plover: 2 Nov (1) OHL, DVC (WJC), only report. Upland Sandpiper: 6 Sep (1) Hillsboro, CFC (ELR), only report. Dunlin: 4 Nov (3) Hillsboro, CFC (RWL), only report. Stilt Sandpiper: 4 Sep (8) Hillsboro, CFC (DLD), only report. Buff-breasted Sandpiper: 6 Sep (1) Hillsboro, CFC (ELR). Short-billed Dowitcher: 6 Sep (9) Hillsboro, CFC (DLD). FRANKLIN'S GULL:

2 Nov (1) OHL, DVC (WJC). LAUGHING GULL: 19 Oct-4 Nov (1) WDR (RWL). Ring-billed Gull: 25 Nov (1) Lawrenceburg, Lawrence Co. (DJS, RRS), ers. Herring Gull: 3 Oct (1) Normandy Res., CFC (MDH), ers. Common Tern: 8 Sep (2) WDR (DLD). Forster's Tern: 15 Oct (11) Normandy Res., CFC (MDH), max, lrs. Black Tern: 21 Aug (20) WDR (RWL), max.

Cuckoo–Vireo: Black-billed Cuckoo: 11 Sep (1) CLA (AHH), ers. Ruby-throated Hummingbird: 26 Oct (1) Tullahoma, CFC (Mattie T. Shockley), lrs. Yellow-bellied Sapsucker: 26 Sep (1) CLA (AHH), ers. Least Flycatcher: 17 Sep (1) BAH (RWS). Horned Lark: 24 Nov (50) Tims Ford Res. area, FKC (RWL), max. Purple Martin: 30 Sep (1) DVC (WJC), lrs. Tree Swallow: 20 Oct (1000) WDR (RWL), max. Red-breasted Nuthatch: 17 Sep (1) Love Circle, DVC (JCA), ers; 4 reports for region. Winter Wren: 4 Oct (1) BAH (RWS), ers. Golden-crowned Kinglet: 4 Oct (1) BAH (RWS), ers. Ruby-crowned Kinglet: 26 Sep (1) CLA (AHH), ers. Veery: 10 Sep (3) BAH (RWS), ers; 17 Sep (10) BAH (RWS), max. Swainson's Thrush: 4 Sep (1) CLA (AHH), ers. Water Pipit: 8 Nov (3) Hillsboro, CFC (ELR), only report. Cedar Waxwing: 10 Aug (3) CCNWR, SWC (Ellen J. Walker), ers. Solitary Vireo: 29 Oct (1) CCNWR, SWC (Nita R. Heilman), lrs. Philadelphia Vireo: 1 Sep (1) CLA (AHH), ers. 4 Oct (1) RDL, DVC (JCA), lrs.

Warbler–Siskin: Blue-winged Warbler: 5 Oct (1) CFC (FNM), lrs. Golden-winged Warbler: 1 Sep (1) CLA (AHH), ers; 18 Sep (1) BAH (RWS), lrs. Tennessee Warbler: 31 Oct (1) CLA (AHH), lrs. Nashville Warbler: 13 Sep (1) Love Circle, DVC (JCA), ers; 22 Oct (2) CLA (AHH), lrs. Chestnut-sided Warbler: 26 Sep (1) Love Circle, DVC (JCA), ers.; 11 Oct (1) RDL (JCA), lrs. Magnolia Warbler: 1 Sep (2) BAH (RWS), ers; 25 Oct (1) Pennington Bend, DVC (Margaret L. Mann), lrs. Cape May Warbler: 12 Oct (1) CFC (FNM); 16 Oct (1) Tullahoma, CFC (RWL). Yellow-rumped Warbler: 27 Sep (1) RDL (JCA), ers. Blackpoll Warbler: 25 Sep (1) WSMV transmitter, DVC (Katherine A. Goodpasture, Ann Houk), television tower casualty, specimen in Warner Park Nature Center skin collection. Connecticut Warbler: 11 Sep (1) CLA (AHH); 27 Sep (1) Monteagle, FKC (ELR). Hooded Warbler: 4 Oct (1) CLA (AHH), lrs. Wilson's Warbler: 20 Sep (1) CLA (AHH), only report. Vesper Sparrow: 24 Oct (2) CCNWR (AHH), only report. Purple Finch: 19 Nov (2) CLA (AHH), ers. Pine Siskin: 13 Nov (1) Hillsboro, CFC (ERL), ers; reported from 4 locations.

Locations: AEDC-Arnold Engineering Development Center; BAH-Barnes Hollow, Putnam Co.; CCNWR-Cross Creeks National Wildlife Refuge; CFC-Coffee Co.; CLA-Clarksville, Montgomery Co.; DVC-Davidson Co.; FKC-Franklin Co.; MUC-Maury Co.; OHL-Old Hickory Lake; PPL-Percy Priest Lake; RDL-Radnor Lake, Davidson Co.; RUC-Rutherford Co.; WDR-Woods Reservoir, Franklin Co.

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EASTERN RIDGE AND VALLEY REGION — The region experienced a wet and fairly warm fall season. Rainfall during Sep was twice the normal amount, causing scattered flooding. The other three months received near average to slightly greater than average precipitation. All of this water kept area lakes filled much later into the season than normal. Temperatures were mostly near normal. However, cold snaps in early and mid-Oct, the latter bringing the first snow flurries to Johnson

City and Knoxville, were followed by a very mild "Indian summer" over the last 10 days of the month. A couple of heavy frosts occurred in mid-Oct in the Johnson City area, but not until into Nov at Knoxville. The remnants of Hurricane Hugo passed just east of the region on 22 Sep, with winds of 30-40 mph and about 0.75 in. of rain in the Johnson City area. But no unusual birds associated with Hugo were found, unlike areas directly in its path. Cold fronts on 23 Sep (immediately after Hugo), 5 Oct, 14-15 Oct, and 15-16 Nov produced good movments of birds.

There seemed to be more "lows" than "highs" among migrants this season. High lake levels covered shoreline habitat resulting in low numbers of wading birds and shorebirds at traditional sites. However, one set of farm ponds at Limestone, in Washington Co., had a good variety of shorebirds for the northeast corner of the region. A good flight of cormorants was noted. Waterfowl were scarce everywhere, perhaps partly due to the generally mild conditions. Also, measures for the "control of water weeds on Chickamauga Lake certainly didn't enhance conditions for feeding coots, grebes, and waterfowl." Raptors received little comment. The warbler flight was considered poor by several observers. The Oct cold snaps forced many passerine migrants to move on, but a suprising number of lingerers were found, especially in the Johnson City area. A modest influx of boreal invaders appeared. And, as usual, a few rarities were reported.

Two banding stations were operated, both for their tenth fall season. Rain hampered activities at both sites. At Norris, Chuck Nicholson banded from 19 Aug to 11 Nov. Days of operation (23), net-hours (503), and number of birds banded (377) were all below average. The capture rate was the lowest ever. Habitat alteration was partly to blame, but a poor flight was evident. At Austin Springs, Rick Knight ran mist nets on 32 days (near average) from 8 Sep to 31 Oct. The capture rate during Sep was very low, but a major surge of sparrows and goldfinches in late Oct brought the overall rate back up near the long-term average. He banded 645 birds, the second highest ever, of 46 species.

Many other interesting observations are reported below.

Loon–Heron: Common Loon: 15 Aug (1) CHL (Albert M. Jenkins), unseasonably early; 5 Oct (1) CHL (DCC), more normal arrival; 12 Nov (50) TEL (fide J.B. Owen), max; 15 Nov (33) BOL (RLK). Pied-billed Grebe: 24 Aug (1) BLV (BGM), ers. Horned Grebe: 22 Oct (1) TEL (ARH, RDH), ers; 23 Nov (68) CHL (KHD, LHD), max. Double-crested Cormorant: good showing; 18 Aug (2) HRA (Albert M. Jenkins); 9 Sep (3) NIL (RJH); present mid-Sep-EOP (max 6 on 16 Sep by JAK) Fort Loudoun Lake, KNC & TEL (KNX TOS); 19 Sep-11 Oct (1-5) AUS (RLK et al.); 4 Oct (2) BOL (Martha Dillenbeck); 5 Oct-14 Nov (1-2) Davy Crockett Lake, Greene Co. (Jim Holt et al.); 20 Oct (39) CRL, Hawkins Co. portion (DCC); 21 Oct (38) CHL (CDB); 12 Nov (6) NIL (RJH); 28 Nov (1) BOL (RLK). American Bittern: 2 Nov (1) TCA (BLC), only report. Great Egret: 3-25 Aug (1-4) CRL (DCC); 8 Aug-18 Sep (1) AUS (RLK et al.); 21 Aug-21 Sep (1) BLV (BGM); 23 Aug -20 Sep (1) SAB (KHD, LHD); 5 Sep (5) Fort Loudoun Lake, KNC (Paul S. Pardue); max of 32 on 16 Sep at Rankin's Bottom, Cocke Co. (JAK). Little Blue Heron: 18 Aug-2 Sep (1) KSP (KHD, LHD); 25 Aug-16 Sep (1-6) BLV (BGM); 1 Sep (10) SAB (KHD). Cattle Egret: 2 Aug (1) CRL, Grainger Co. portion (DCC); 31 Aug (1) LST (BLC). Black-crowned Night Heron: 22 Aug (30) Boone Dam, Sullivan Co. and WGC (BLC); 26 Aug (10) KSP (KHD, LHD); 15 Aug-9 Oct (1-4) AUS (RLK).

Yellow-crowned Night Heron: 22 Aug (1) JNC (Richard Lura); 22 Aug/16 Sep (1/3) BLV (BGM); 29 Sep-2 Oct (1) CHA (KHD).

Waterfowl: Tundra Swan: 24 Nov (4) flying over Greeneville (Thomas and Lucy Webster). Snow Goose (blue morph): 4 Nov (1) HRA (LHD et al.); 12 Nov (1) NIL (RJH). Green-winged Teal: 4 Nov (300) HRA (LHD et al.), max. American Black Duck: 30 Nov (355) HRA (TWRA), max. Blue-winged Teal: 29 Aug (42) AUS (RLK), max. Gadwall: 30 Nov (277) HRA (TWRA), max. American Wigeon: 30 Nov (83) HRA (TWRA), max. Canvasback: 10 Nov (1) HRA (KHD, LHD); 11/24 Nov (29/25) NIL (Tommie Rogers/RJH), only reports. Redhead: 23 Nov (15) CHL (KHD, LHD), max. Ring-necked Duck: 10 Nov (333) HRA (KHD, LHD), max. Hooded Merganser: 18 Aug (1) KSP (KHD, LHD), ers; 26 Nov (160) HRA (KHD), max. Common Merganser: 28 Nov (1) BOL (RLK), only report.

Vulture–Crane: Turkey Vulture: 6 Nov (150 migrating in rain) NOR (CPN). ROUGH-LEGGED HAWK: 28 Oct (1 light morph) Jasper, Marion Co. (Lenny Kafka). Merlin: 27 Oct (1) TCA (BLC). Peregrine Falcon: 4 Nov (1 ad, 1 im) HRA (LHD et al.). Virginia Rail: 4-5 Oct (1) AUS (RLK). Common Moorhen: 28 Aug-1 Sep/24 Sep-7 Oct (1 ad) AUS (BLC/RLK); 16-19 Sep, 3 Nov (1) BLV (BGM et al.); 3 Nov (1 im) BOL (BLC, Frank Ward). Sandhill Crane: 4 Nov-EOP (34 reports totaling 2386 cranes, with some duplication likely) 9 counties along the usual migration route but with most reports coming from the CHA area (fide KHD, CPN); the peak flights came in mid- to late Nov, see also winter report.

Shorebirds: Black-bellied Plover: 18 Oct (3) AUS (RLK), 6th JNC area record, only report. Lesser Golden Plover: 9-10 Oct (1) AUS (RLK), 8th JNC area record (found 5 of last 6 years, all records since 1979); 5 Nov (2) HRA, Bradley Co. portion (KHD, LHD). Piping Plover: 3-4 Sep (1) KSP (Bob Collier, KHD, LHD). Greater Yellowlegs: 20 Nov (3) WGC (BLC), record late by 4 days in JNC area; 26 Nov (1) HRA (KHD, LHD), lrs. Lesser Yellowlegs: 30 Sep (28) LST (RLK, JWB), max. Sanderling: 20-29 Aug (1-2) LST (BLC, SG, RLK); 2-13 Sep (1-3) KSP (KHD, LHD, RJH, DCC). Semipalmated Sandpiper: 4 Nov (4) HRA (LHD et al.), lrs. Western Sandpiper: 18-23 Aug (1-2) LST (BLC, RLK); 19 Aug-13 Sep (1-4) KSP (KHD, LHD); 20-24 Aug (1-4) EBF (DJS, RRS). Least and Pectoral Sandpipers: widespread, but in very low numbers. White-rumped Sandpiper: no reports. Baird's Sandpiper: 10 Aug (1) EBF (DJS, RRS); 3-13 Sep (3) KSP (Bob Collier, KHD, LHD, RJH, DCC). Dunlin: 9-18 Oct (1-8) AUS (RLK, BLC, JWB); 15 Oct (2) HRA (KHD, LHD), ers at CHA area wintering areas. Stilt Sandpiper: 1 Aug (1) EBF (CPN, DJS); 29 Aug-1 Sep (1) LST (RLK); 31 Aug-2 Sep (1) BOL (BLC); 2-13 Sep (1-3) KSP (KHD, LHD, RJH, DCC). Short-billed Dowitcher: 20 Aug (2) EBF (DJS, RRS); 2-12 Sep (1-3) KSP (KHD, LHD, RJH, DCC). Dowitcher species: 10 Oct (4) AUS (BLC). Common Snipe: 26 Sep (2) AUS (RLK), ers. American Woodcock: 27 Nov (1) Greene Co. (Jim Holt). Wilson's Phalarope: 19-26 Aug (1) LST (BLC, RLK, et al.), 5th JNC area record.

Gull–Humingbird: Ring-billed Gull: 25 Sep (1) AUS (RLK), ers. Caspian Tern: 2-12 Sep (1-3) KSP (KHD, LHD, RLH); 4 Sep (4) SAB (KHD, LHD); 12 Sep (9) AUS (RLK); 23 Sep (4) BOL (JWB); 25-26 Sep (2) AUS (RLK, SG). Common Tern: 4 Sep (1) KSP (KHD, LHD). Forster's Tern: 24 Aug (2) BOL (RLK); 14 Sep (1) AUS (RLK); 1 Oct (20) BOL (FJA); 4 Nov (1) HRA (ARH, LHD, Johnny T. Parks). Black Tern: 20 Aug (5) John Sevier Steam Plant, Hawkins Co. (Phine and

Orland Britton, Linda Northrop et al.); 24 Aug (6) BOL (RLK); 1 Sep (1) AUS (BLC); 4 Sep (1) KSP (KHD, LHD). Barn Owl: 12 Aug (2 fledged yg) Ware Branch, HLC (KHD, LHD); 14 Aug (1) near JNC (Cat Bireley); 11, 18 Nov (2) Pikeville, Bledsoe Co. (RJH, DRJ et al.); 12-18 Nov (1) railroad underpass on Carter's Valley Road, Sullivan Co. (Dan Nieves); fresh pellets regularly collected at Veteran's Administration campus, JNC (fide FJA). Common Nighthawk: 2 Oct (150 migrating on first clear evening after several rainy days) JNC (RLK), large number for date; 27 Oct (1) KNX (Bettie Mason); 31 Oct (1) Bristol (BLC), lrs. Chimney Swift: 23 Oct (1) JNC (RLK), 1 day short of tying record late date in JNC area; 28 Nov (4) CHA (CDB), extremely late. For this last record, was a western vagrant considered? As with hummingbirds, Empidonax flycatchers, and some other groups late fall and winter records should not be assumed to be the eastern representative of that group. RUFOUS HUMMINGBIRD: 26 Sep-EOP (1 ad male) CHA (fide KHD), at same feeder where 1 wintered last year.

Flycatcher–Vireo: Great Crested Flycatcher: 8-18 Sep (2,1 b) AUS (RLK), lrs. Horned Lark: 6 Sep (47) LST (BLC); 11 Nov (50) Sequatchie Valley, Marion Co. (RJH, DRJ). Tree Swallow: 28 Nov (1) CHA (CDB), lrs. Bank Swallow: 30 Sep (1) AUS (RLK, JWB), record late by 15 days in JNC area. Red-breasted Nuthatch: 24 Sep (2) KNC (James Campbell et al.), ers; scattered low numbers afterwards. House Wren: 14 Nov (2) AUS (RLK), lrs. Winter Wren: 7 Oct (1) AUS (RLK), ers. Sedge Wren: 5 Sep (1) TCA (BLC), only report. Marsh Wren: 24 Sep-3 Oct/23-24 Oct/31 Oct (1-3, 1 b/1/1 b) AUS (RLK); 5 Oct (2) TCA (BLC); 4 Nov (1) near NIL (DCC). Golden-crowned & Ruby-crowned Kinglets: very numerous in JNC area from mid-Oct to EOP (fide RLK). Blue-gray Gnatcatcher: 29 Nov (1) KNC (Paul S. Pardue), lrs. Veery: 15 Oct (1) JNC (SG), lrs. Swainson's Thrush: 24 Sep (24) KNC Fall Count (fide CPN), max. Gray Catbird: 13 Nov (1) Telford, WGC (RLK), lrs. Water Pipit: 2 Oct-EOP (3-25) AUS (RLK). White-eyed Vireo: 24 Oct (1 b) AUS (RLK), lrs. Warbling Vireo: 24 Sep (1) KNX (James Campbell, Betty Reid Campbell), seldom seen in fall. Red-eyed Vireo: 30 Oct (1) JNC (SG), ties record late date in JNC area, lrs.

Warblers: Tennessee Warbler: 24 Oct (2) AUS (RLK), lrs. Orange-crowned Warbler: 7 Oct (2) Harrison, HLC (CDB, Johnny T. Parks); 15 Oct (1) near Crossville (CPN, ARH); 24 Oct (1 b) AUS (RLK); 14 Nov (1) AUS (RLK). Nashville Warbler: 23 Oct (1) AUS (RLK), lrs. Yellow Warbler: 2 Oct (1 b) AUS (RLK), lrs. Magnolia Warbler: 14 Nov (1) AUS (RLK), ties record late date in JNC area, lrs. Cape May Warbler: 24 Oct (1) JNC (SG), lrs. Yellow-rumped Warbler: 5 Oct (2) AUS (RLK), ers, slightly later than average. Palm Warbler: thru EOP at AUS (RLK), lrs. Bay-breasted Warbler: 23 Oct (1) JNC (SG), lrs. BLACKPOLL WARBLER: 28 Sep (1 b) AUS (RLK), rare in fall. Cerulean Warbler: 9 Oct (1 b) NOR (CPN), seldom encountered in fall. Ovenbird: 15 Oct (1) JNC (SG), lrs. Northern Waterthrush: 7 Sep-10 Oct (8 b) AUS (RLK). Louisiana Waterthrush: 24 Sep (1) KNC (ARH, Ron Hoff, Gay Morton), very seldom seen past mid-Aug. Connecticut Warbler: 28 Sep (1 b) AUS (RLK), only report. Mourning Warbler: 13 Sep (1 b) AUS (RLK), only report. Common Yellowthroat: 30 Oct (1) AUS (RLK), lrs. Wilson's Warbler: no reports, which is unusual.

Bunting–Grosbeak: Indigo Bunting: 28 Nov (1) Conklin, WGC (fide FJA), lrs. Vesper Sparrow: 24, 31 Oct (1) AUS (RLK); 1 Nov (2) BLV (BGM). Savannah

Sparrow: 20 b at AUS was above average (RLK). Grasshopper Sparrow: 25 Sep (1) AUS (RLK), lrs. SHARP-TAILED SPARROW: 30 Oct (1) AUS (RLK); 2 Nov (1) TCA (BLC); 8th & 9th records in JNC-Elizabethton area. Fox Sparrow: 18 Oct (1 b) AUS (RLK), ers. Lincoln's Sparrow: 30 Sep-25 Oct (10 b) AUS (RLK); 22 Oct (1) CHA (RJH). Swamp Sparrow: record high 93 b at AUS (RLK). White-crowned Sparrow: 24 Oct (1 ad Gambel's race, b & ph) AUS (RLK). LAPLAND LONGSPUR: 4 Nov (1) UT Plant Science Farm, KNC (DJS); 11 Nov (1) Sequatchie Valley, Marion Co. (RJH, DRJ), in a flock of Horned Larks, only the second record in CHA area. Bobolink: 12 Sep (60) LST (FJA), max. Purple Finch: rather scarce again this fall. Pine Siskin: ers, 27 Oct (1) Signal Mountain, HLC (Jonnie Sue Lyons), 28 Oct (10/4) NOR/AUS (CPN/RLK), 3 Nov (12) Greenville (Phine Britton); widespread in low numbers. Evening Grosbeak: no reports.

Locations: AUS-Austin Springs, Washington Co.; BLV-Brainerd Levee, Hamilton Co.; BOL-Boone Lake, Sullivan & Washington Cos.; CHA-Chattanooga; CHL-Chickamauga Lake, Hamilton Co.; CRL-Cherokee Lake, Grainger, Hamblen, & Hawkins Cos.; EBF-Eagle Bend Fish Hatchery, Anderson Co.; HLC-Hamilton Co.; HRA-Hiwassee River Area, primarily Meigs Co., but also Bradley, McMinn & Rhea Cos.; JNC-Johnson City; KNC-Knox Co.; KNX-Knoxville; KSP-Kingston Steam Plant, Roane Co.; LST-Limestone, Washington Co.; NIL-Nickajack Lake, Marion Co.; NOR-Norris, Anderson Co.; SAB-Savannah Bay, Hamilton Co.; TCA-Tri-cities Airport, Sullivan Co.; TEL-Tellico Lake, Monroe Co.; WGC-Washington Co.

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EASTERN MOUNTAIN REGION — The meteorological event of the period for the region was the passing of the remnants of Hurricane Hugo through NE Tennessee on 22 Sep. The storm passed over Watauga Lake at 10 AM leaving a mix of petrel, jagers, gulls and terns that was astounding for an inland montain area. Hugo packed winds up to 40 mph and, in some areas, dropped up to 3 in of rain.

There was 16.2 in. of precipitation for the four month period which was 4.4 in. above normal for the Aug through Nov months. Sep's 6.95 in of precipitation made it the second wettest Sep on record.

Most waterfowl and hawks were at normal levels. There were no shorebird reports, lake levels were high. "Spotted thrushes" were scarce except for the Hermit. Warblers were found in fair numbers, but no big waves.

Loon–Duck: Red-throated Loon: 2 Nov (1) SHL (BLC). Common Loon: 25 Sep (3) WTL (fide FJA), ers, earlier than usual; 2/20 Nov (45/48) SHL (BLC), max. Pied-billed Grebe: 26 Aug (2) ELI (HPL), ers. Horned Grebe: 24 Oct (1) /12 Nov (9) SHL (BLC). Double-crested Cormorant: 25-30 Sep (1) WTL (GOW, RDL et al.); 24 Oct and 3 Nov (1) SHL (BLC); 27 Oct (1) GSMNP, flying over Chimneys (DJS, David A. Etnier). Storm-petrel species: 22 Sep (1) WTL (*BLC), about 3rd state record. Little Blue Heron: 10 Aug (1 im) RNC (BLC). Green-backed Heron: 4 Nov (1) WTR (CFW), lrs. Black-crowned Night Heron: 24 Sep (1) RNC (FJA). Snow Goose: 19 Nov (3 blue, 1 white morph) TEL (RDH, ARH, et al.). Green-winged Teal: 16 Oct (2) WTR (FJA); 16 Nov (2) WTR (RLK), only reports. Am. Black Duck: 7 Nov (2) WIL (FJA); 22 Nov (10) SHL (BLC), only reports. Blue-winged Teal: 16 Oct (3) WIL (FJA), lrs. Am. Wigeon: 22 Oct (1) WIL (JWB),

only report. Ring-necked Duck: 16 Nov (18) SHL (BLC), max. Greater Scaup: 6 Nov (2) SHL (BLC), only report. Lesser Scaup: 8 Nov (176) SHL (BLC), max; 10 Nov (30) WTL (GWS, CFW). White-winged Scoter: 13 Nov (7) SHL (BLC); 16-18 Nov (1 f) Cades Cove, GSMNP, Blount Co. (DCC, RDH, ARH). Bufflehead: 17 Nov (170) SHL (BLC), max; max of 60 on WIL in Nov (LHTOS). Hooded Merganser: 30 Sep (1) WTL (GOW, RDL, HPL, CFW, JB), record early by 1 day, only report. Common Merganser: 17 Nov (1) SHL (BLC), only report. Red-breasted Merganser: 13 Nov (46) SHL (BLC), only report. Ruddy Duck: 25 Oct-7 Nov (1) SHL (BLC), only report.

Hawk–Tern: Osprey: several reports late Sep to early Oct, WTL (LHTOS). MISSISSIPPI KITE: 24 Sep (1) Look Rock, Blount Co. (ARH, Gay Morton). Bald Eagle: 29 Jul (1 ad) TEL (RDH, ARH, CPN); 17 Sep (1 im) Look Rock, Blount Co. (RDH, ARH), migrating; Sep-EOP (1 im) TEL (RDH, ARH, et al.); 30 Sep (1 ad) WTL (GOW, RDL, HPL, CFW, JB); 25 Oct (1 im) SHL (BLC, JWB); 2-22 Nov (1 ad) SHL (BLC, RLK). Northern Harrier: 2 Sep (1) RNM (Rick A. Phillips); 19 Nov (1) TEL (ARH, et al.). Merlin: 30 Sep (1) Blue Springs, Carter Co. (GOW, RDL, HPL, CFW, JB). Red-shouldered Hawk: no reports. Sora: 30 Sep (1) Erwin, Unicoi Co. (SG, GWS, BLC); 4 Oct (1) Round Bald, RNM (EHS), very unusual high elevation record. POMARINE JAEGER: 22-23 Sep (1 ad, 1 im) WTL (*BLC, m. ob.). PARASITIC JAEGER: 22-23 Sep (1 ad) WTL (*BLC, m. ob.). Jaeger species: 22 Sep (4) WTL (*BLC). LAUGHING GULL: 22-23 Sep (6/1) WTL (BLC, m.ob.), 2nd WTL record, 3rd ELI record. Bonaparte's Gull: 3-14 Nov (8) SHL (BLC). Ring-billed Gull: 17 Nov (210) SHL (BLC), max. Herring Gull: 22-30 Sep (2-1) WTL (BLC, m.ob.), ers. LESSER BLACK BACKED GULL: 22 Sep (1 ad) RNC (*HPL, BLC, CFW, MD), 1st state record. ROYAL TERN: 22 Sep (2) RNC (*HPL, BLC, CFW, MD), 1st state record. The records in capital letters above are the result of Hurricane Hugo, records pending approval by the certification comm.; details to be published. Common Tern: 22-24 Sep (1-2) WTL (BLC, m.ob.). Forster's Tern: 22-24 Sep (50+) WTL (BLC, m.ob.); 20 Oct (3) and 7 Nov (7) SHL (BLC), latest area record by 10 days. Black Tern: 22 Sep (10) WTL (BLC), only report.

Swift–Warbler: Chimney Swifts: 24 Oct (1) ELI (GOW), lrs, ties area record late date. RUFOUS HUMMINGBIRD: 25 Nov-EOP (1 ad, male) Unicoi, Unicoi Co. (LHTOS), present at feeder since early Oct, ph, 3rd local record. Yellow-bellied Sapsucker: 3 Oct (1) ELI (HPL), ers. Purple Martin: 30 Sep (6) WTL (GOW, RDL, HPL, CFW, JB), lrs, very late. Common Raven: 30 Sep (3) and 16 Oct (2) WIL (GOW, RDL, et al./ FJA); 29 Oct (2) SHL (RPL). Red-breasted Nuthatch: 23 Sep (1) RNC (LHTOS), earliest low elevation record; 1-4 regular on RNM (RLK). Winter Wren: 5 Oct (1) ELI (HPL), earliest low elevation record. Sedge Wren: 30 Sep (2) Erwin (GWS, SG, BLC). Marsh Wren: 30 Sep (1) WIL (GOW, RDL, HPL, CFW, JB); 30 Sep (1) Heaton Cr., RNM (FJA). House Wren: 19 Nov (1) TEL (ARH, et al.), lrs. Gray Catbird: 29 Oct (1) SHL (RPL), lrs. Solitary Vireo: 24 Oct (1) SHL (BLC), lrs. Philadelphia Vireo: 9 Sep (1) RMSP (LHTOS). Blue-winged Warbler: 9 Sep (1) RNM (GOW); 26 Sep (1) ELI (HPL). Magnolia Warbler: 31 Aug (1) ELI (HPL), ers, record early by 4 days. Blackpoll Warbler: 3 Oct (1) ELI (HPL), only report. Prothonotary Warbler: 24 Oct (1) SHL (BLC), only report, late record by 5 days. Worm-eating Warbler: 9 Sep (1) RMSP (RLK), lrs. Mourning Warbler: 5 Oct (3) BUF (BLC).

Tanager–Grosbeak: Scarlet Tanager: 24 Oct (1) SHL (BLC), lrs, late. Rose-breasted Grosbeak: 24 Oct (1) SHL (BLC), lrs. Chipping Sparrow: 30 Nov (1) Unicoi (RLK), lrs. Vesper Sparrow: 9 Sep (1) Round Bald, RNM (RLK, Bill Yambert); 25 Oct (1) SHL (BLC, JWB), only reports. Eastern Meadowlark: 4 Oct (1) Round Bald, RNM (EHS), unusual there. Purple Finch: 28 Oct (1) SHL (RPL), ers, only ones and twos after that. Red Crossbill: 27 Oct (3) and 20 Nov (15) SHL (BLC); 9 Nov (2 fem, 1 im) Cobbly Knob, Sevier Co. (FJA). Pine Siskin: 27 Oct (200) BUF (RLK), ers, max; numerous reports after that of small numbers. Evening Grosbeak: 2 Nov (10) SHL (BLC), only report.

Locations: BUF-Buffalo Mt., Washington Co.; ELI-Elizabethton, Carter Co.; RMSNP-Roan Mt. State Park, Carter Co.; RNC-Roan Creek section of Watauga Lake, Johnson Co.; RNM-Roan Mt., Carter Co.; SHL-South Holston Lake area, Sullivan Co.; WIL-Wilbur Lake, Carter Co.; WTL-Watauga Lake; WTR-Watauga River area, Carter Co.

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CARTER, Mr. Eddie H., 217 Claire Street, Rossville, GA 30741 CHAT 1988
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CHAFFIN, Dr. David, 1606 Everhart Drive NW, Cleveland, TN 37311-1523 CHAT 1985
CHASTAIN, M/M James D., 1121 Park City Road, Rossville, GA 30741 CHAT 1983
CHICKERING, Dr. Joanne, 14101 Winding Ridge Lane, Centreville, VA 22020 MEM 1978
CHITWOOD, Dr. Howard, Rt. 3, Box 174, Jefferson City, TN 37760 KNOX 1975
CHRIETZBERG, Mrs. Bertha, 1715 Elrod, Murfreesboro, TN 37130 MURF 1971
CHRISTMAN, Lucy, 727 Radford Place, Knoxville, TN 377917 MURF 1989
CLAIBORNE, Mrs. Barbara T., Route 5, Box 695,
River Canyon Road, Chattanooga, TN 37405 CHAT 1982
CLARK, M/M E. Jack, 3390 Austinwood Drive, Memphis, TN 38118 MEM 1975
CLARK, Mr. Richard, Route 7, Box 297A, Lenoir City, TN 37771 KNOX 1985
CLARK, III, Dr. & Mrs. Robert, 2927 Ozark Road, Chattanooga, TN 37415 CHAT 1986
CLECKLEY, Mr. John E., P. O. Box 632, Tullahoma, TN 37388 HR 1979
CLINE, Ms. Marilyn E., 8731 Wimbledon Drive, Knoxville, TN 37923 KNOX 1981
COATS, Jr., Dr. & Mrs. Fred H., 3621 Glendon Drive, Chattanooga, TN 37411 CHAT 1984
COBB, Mrs. David G., 6452 Tea Rose Terrace, Brentwood, TN 37027 NASH 1978
COFFEY, Jr., Mr. Ben B., 672 N. Belvedere, Memphis, TN 38107 MEM 1926
COFFEY, Jr., Mrs. Ben B., 672 N. Belvedere, Memphis, TN 38107 MEM 1931
COFFEY, M/M J. Wallace, 100 Bellebrook Drive, Bristol, TN 37620 BRI 1959
COLAW, Ms. Barbara L., 9116 Carlton Circle, Knoxville, TN 37922 KNOX 1987
COLE, III, Jewett, 2943 Invergarry Road, Memphis, TN 38128 MEM 1988
COLE, Mr. Paul, 8520 Blanche Road, Ooltewah, TN 37363 CHAT 1986
COLEMAN, M/M O. E., 1506 Bexhill Drive, Knoxville, TN 37922 KNOX 1987
COLLIER, Dr. Bob, 326 Granville Conner Road, Powell, TN 37849 KNOX 1986
COLLINS, Ms. Elizabeth C., 4400 Belmont Park Terrace,
#110, Nashville, TN 37215 NASH 1981
COLLINS, Dr. & Mrs. John R., 2907 East Brow Road, Signal Mountain, TN 37377 CHAT 1989
COLLINS, M/M Mike, 2920 Bede, Memphis, TN 38128 MEM 1986
CONDER, M/M John R., P. O. Box 443, Camden, TN 38320 TAL 1959
CONRAD, M/M Herbert C., 6340 Fairest Drive, Harrison, TN 37341 CHAT 1989
COOKSEY, Mr. George, 2407 Braxton Bragg, Murfreesboro, TN 37129 MURF 1990
COOPER, M/M James H., 41 D Street, S. E., Washington, DC 20003 TAL 1986
COOPER, Jr., M/M Brainard, 176 Ridge Ave., Chattanooga, TN 37404 CHAT 1978
CORE, Mr. Andrew, 5612 N. Century Court, Knoxville, TN 37919 KNOX 1987
COSNER, Jr., C. Kinian, 3818 West End Avenue, #302, Nashville, TN 37205-2467 NASH 1984
COTTRELL, M/M Otey, 212 Lynnview Ave., Knoxville, TN 37918 KNOX 1985
COUCH, Sr., Mrs. Clay, 105 S. Tarver Avenue, Lebanon, TN 37087 SEL 1959
COUNCE, Mr. Howard A., 1469 Whiting St., Memphis, TN 38117 MEM 1937
COUNTS, Mrs. Henry, 519 West Spring Street, Lebanon, TN 37087 SEL 1980
COURT, M/M Charles, 9327 River Bluff Rd., Millington, TN 38053 MEM 1987

COWARD, Jr., Dr. & Mrs. Sam B., P. O. Box 49456, Algood, TN 38501 TAL 1974
COX, M/M Gordon, 105 Valleywood East, Collierville, TN 38017 MEM 1984
COX, II, Dr./Mrs. Clair E., 6011 Sweetbriar Cv., Memphis, TN 38119 Mem 1980
COZART, Mrs. Dorothy Draughon, 4401 Scenic Drive, Nashville, TN 37204 NASH 1968
CRAGIN, Jr., M/M Herbert E., Rt. 9, Box 74, Greeneville, TN 37743 GRE 1985
CRAWFORD, M/M Paul, 211 Shetland Way, Greer, SC 29650 CORR 1967
CRAWFORD, Capt. Robert L., P. O. Box 613, Hixson, TN 37343 CHAT 1981
CREECH, Miss Annella, 8 McKendree Circle, Hermitage, TN 37076 NASH 1958
CREECH, Mr. Chris, 417 N. Perkins Road, Memphis, TN 38117 MEM 1984
CRENSHAW, Ms. Camille, 865 Bellevue Road, Apt. C-9, Nashville, TN 37221 NASH 1983
CRISWELL, Mr. William G., Route 4, Box 206, Dyersburg, TN 38024 TAL 1977
CROSBY, Mrs. Ray, Rural Route 1, Midway, TN GRE 1988
CROSS, Mr. Brian, 1110 Edgewood Street, Johnson City, TN 37604 HERN 1988
CROUCH, Jr., M/M Ed., 111 W. 99th Terrace, Kansas City, MO 64114 BR 1987
CROW, Ms. Ann L., 2712 Belcourt Avenue, Nashville, TN 37212 NASH 1990
CROWELL, Mr. Larry, Route 2, Box 1940, Friendsville, TN 37737 KNOX 1990
CUMMINS, Catherine & James, V. Remsen, Jr.,
Museum of Natural Sciences, LSU Baton Rouge, LA 70803 CORR 1983
CUSHMAN, M/M George T., 117 Saligugi Way, Loudon, TN 37774 KNOX 1990
DAILY, Mrs. Dollyann, P. O. Box 171273, Memphis, TN 38187-1272 MEM 1977
DARLINGTON, Dr. & Mrs. Julian T., 3112 Glenfinnan Road, Memphis, TN 38128 MEM 1965
DAUGHERTY, Mr. Robert, 1013 Morrow Road, Knoxville, TN 37923 KNOX 1990
DAVANT, Miss Mary, 861 N. McLean Blvd., Memphis, TN 38107 MEM 1929
DAVIDSON, Mr. Don, 1703 2nd Avenue, Manchester, TN 37355 HR 1989
DAVIS, Ms. Angela, 1715 Skyline Dr., Chattanooga, TN 37421 CHAT 1981
DAVIS, Eric & Sarah Anne, 1538 Lambuth Boulevard, Jackson, TN 38301 JAC 1990
DAVIS, Marcia, 3450 Navigator Pointe, Knoxville, TN 37922 KNOX 1976
DAVIS, Ms. Marie H., 217 Claire Street, Rossville, GA 30741 CHAT 1984
DAVIS, M/M Robert L., 1915 Pine Ridge Road, Seymour, TN 37865 KNOX 1988
DEADERICK, M/M Ralph, 1220 Dogwood Drive, Kingston, TN 37763 KNOX 1986
DENT, Pamela J., 7647 Gann Road, Hixson, TN 37343 CHAT 1989
DETLEFSEN, Mrs. Fred, 204 West End Heights, Lebanon, TN 37087 SEL 1980
DEVORE, Mr. Jon E., 206 N. McLean, Memphis, TN 38112-5319 TAL 1966
DICKERSON, M/M Dellas K., 3862 Conahaney Trail, Chattanooga, TN 37406 CHAT 1974
DICKERSON, M/M Kenton, 22 Bell Flower Circle, Chattanooga, TN 37411-4205 CHAT 1986
DICKEY, Sr. Mrs. Ernest, 801 Prospect Avenue, Bristol, VA 24201 BRI 1990
DIENER, Mr. Richard L., 9015 Ten Mile Road, #A-217, Knoxville, TN KNOX 1989
DIETRICH, M/M Paul H., 3265 Needlewood Lane NW, Cleveland, TN 37311 CHAT 1984
DILBECK, M/M Stephen H. 1701 No. Concord Road, Apt. 41, Chattanooga, TN 37421 CHAT 1985
DILLEHAY, Dorris, 360 Roberts Drive, Columbia, TN 38401-4344 COL 1988
DILLENBECK, Mrs. Harold L., Rt. 19, Box 253, Johnson City, TN 37601 HERN 1964
DILLON, Polly, 4735 Old Guinn Road, Knoxville, TN 37931 KNOX 1990
DINKELSPIEL, Mrs. Henry, 6519 Massey Lane, Memphis, TN 38119 MEM 1957
DINSMORE, Mr. Michael O., 2832 Jarman Hollow Road, Palmyra, TN 37142 TAL 1973
DITTO, Mr. Billy J., 5685 Ingleside Drive, Horn Lake, MS 38637-3721 MEM 1990
DODD, M/M Jack G., Route 2, Box 137, Buchanan, TN 38222-9547 TAL 1990
DORSEY, Ms. Marian R., 408 Chesterfield, Nashville, TN 37212 NASH 1980
DOVE, Mrs. George, 1905 Knob Creek Road #4, Johnson City, TN 37601 TAL 1966
DOWDY, Mrs. Quentin B., 3630 Sharpe Ave., Memphis, TN 38111 MEM 1967
DOXSEY, Mr. Rodger S., P. O. Box 1867, Fairfield Glade, TN 38555 CUMB 1988
DOYLE, M/M Randall L., 207 Greenleaf St., Chattanooga, TN 37415 CHAT 1982
DRAKE, M/M Earl C., Route 3, Box 143, Hohenwald, TN 38462 COL 1986
DRIVER, Dr. Russell B., 433 McKaig Road, Murfreesboro, TN 37130 MURF 1984
DUBKE, Mr. Kenneth H., 8139 Roy Lane, Ooltewah, TN 37363 CHAT 1957

DUBKE, Mrs. Lillian, 8139 Roy Lane, Ooltewah, TN 37363 CHAT 1970
DUCKWORTH, Dr. & Mrs. John K., 2586 Fogg Road, North, Nesbit, MS 38651 MEM 1988
DUGGER, Mrs. Milbrey, 8 McKendree Circle, Hermitage, TN 37076 NASH 1958
DUNCAN, M/M Hickman, 5406 Hill Road Circle, Nashville, TN 37220 NASH 1978
DUNCAN, Sandra, 628 Timber Lake, Nashville, TN 37215 NASH 1982
DURAND, Kemper & Lillian, 2454 Mackinnon, Memphis, TN 38119 MEM 1990
DYE, Mrs. Jane, Route 2, Box 243, McDonald, TN 37353 CHAT 1989
DYER, Mr. Walt, 109 Hamilton Lane, Tullahoma, TN 37388 HR 1988
DeBERRY, Leona, 26 River Oaks Drive, Apt. D, Jackson, TN 38305 JAC 1990
DeLOACH, M/M Allan, 5513 Meadow Glen Drive, Knoxville, TN 37919 KNOX 1989
DiMEMMO M/M Frank, 5400 Village Garden Road, Collegedale, TN 37363 CHAT 1990
EARNEST, Mrs. Charles E., 101 Old Indian Hill Trail, Greeneville, TN 37743 GRE 1973
EASTMAN, Mr. Donald F., P. O. Box 2629, West Helena, AR 72390 MEM 1989
EATON, M/M John W., Route 1, Box 32, Cleveland, TN 37311 CHAT 1990
EBERLE, III, M/M Joseph, 370 St. Andrew's Fairway, Memphis, TN 38111 MEM 1990
EDDY, Ms. Pat, NO FORWARDING ADDRESS MEM 1988
EIKLOR, M/M John, Rt. 11, Box 178 Gray, TN 37615 TAL 1976
ELLER, Mr. Glen D., 4619 Calvert Road, Huntsville, AL 35816 HERN 1956
ELLIS, Martha W., 53 Steeple Chase Drive, Jackson, TN 38305 JAC 1990
ELPHINGSTONE, Mr. Harold R., 2484 Black Fox Trail, East Point, GA 30344 MEM 1984
ELY, Jr. M/M Robert G., 3230 Keller Bend Road, Knoxville, TN 37922 KNOX 1990
EMBURY, M/M John H., 212 North McLean Blvd., Memphis, TN 38112 MEM 1961
ENDRES, M/M Robert O., 3710 Northwood Drive, Memphis, TN 38111 MEM 1983
ERWIN, Jr., Mr. Billy H., Route 2, Box 187, Murfreesboro, TN 37129 MURF 1973
EVANS, Dr. & Mrs. Hillis F., 421 Menees Lane, Madison, TN 37115 NASH 1976
EWART, Mr. Jim, 5422 Sportsman Drive, Nesbit, MS 38651 MEM 1984
EZELL, Elna C., P. O. Box 3072, Meridian, MS 39303 CORR 1988
FARINASH, Mr. Jerry, 320 N. Holtxclaw Avenue, Chattanooga, TN 37404 CHAT 1988
FARMER, Mr. Bob, 4210 Lake Haven Lane, Chattanooga, TN 37416 CHAT 1990
FARRIS, Mrs. Carter M., 3695 Old Rome Pike, Lebanon, TN 37087 SEL 1964
FARRIS, Miss Rachael, 4911 Sewanee Road, Nashville, TN 37220 NASH 1981
FARTHING, Mr. Harry H., 100 Sherwood Heights, Elizabethton, TN 37643 HERN 1957
FATHERA, Mrs. Bobby, 1024 Carter Lane, Mt. Juliet, TN 37122 SEL 1987
FAULK, Ms. Julia Adams, Route 1, Box 206-A, Loudon, TN 37774 KNOX 1987
FEDAK, Mr. Andrew, Route 1, Box 174, Auburntown, TN 37016 MURF 1989
FENNER, Mr. David K., P. O. Box 909, Elizabethton, TN 37643 HERN 1990
FERGUSON, M/M James A., Iris Hill Farm,
5400 Kimbark Road, Memphis, TN 38134 MEM 1975
FERRELL, Mrs. Benne, Rural Route 1, Box 198D, Centerville, TN 37033-9601 NASH 1988
FIELD, Mr. Robert C., Thomas Weaver Road,
P. O. Box 66, Maynardville, TN 37807 KNOX 1987
FIGARI, Mr. Richard A., P. O. Box 218055, Nashville, TN 37221-8055 COL 1987
FINCH, Dr. & Mrs. William C., 6024 Sherwood Drive, Nashville, TN 37215 NASH 1967
FINNEY, M/M James, 5213 Whitehorse Rd., Knoxville, TN 37919 KNOX 1981
FINUCANE, Marion, 1434 Watauga St., Kingsport, TN 37660 KING 1981
FINUCANE, Mr. T. W., 1434 Watauga St., Kingsport, TN 37660 KING 1945
FISHER, M/M Frank L., Box 1201, Morristown, TN 37814 KNOX 1971
FLEMING, Mrs. Gertrude L., P. O. Box 613, Collegedale, TN 37315 CHAT 1972
FLOY, Mary Leigh & Kent, 4020 Niagra Cove, Memphis, TN 38125-2767 MEM 1989
FLOYD, Ms. Marilyn, Route 2, Box 186A, Hillsboro, TN 37342 HR 1987
FORD, Mr. Bob, 1585 Hollywood, Apt. B23 Jackson, TN 38305 MEM 1985
FOUTCH, M/M David, 181 Goshen Road, Lebanon, TN 37087 SEL 1983
FOWLER, M/M Dale, Rt. #1, Box 331-2,
Mountain Road, Clinton, TN 37716 KNOX 1979

FOWLER, Jo Ann, 551 Mellen Rd., Knoxville, TN 37919 KNOX 1983
FOWLER, Jr., M/M William B., 4564 Willow Road, Memphis, TN 38117 MEM 1978
FOX, Jr., Capt. & Mrs. W. Trent, 10 Vanndenberg Drive, Tullahoma, TN 37388 HR 1990
FRANK, Miss Harriette, 3767 Highland Park Place, Memphis, TN 38111 MEM 1974
FREEMAN, Dr. & Mrs. John R., 3116 No. Lockwood Dr., Chattanooga, TN 37415 CHAT 1974
FRENCH, Elizabeth, 36 Ridgeview Drive, Chickasaw, AL 36611 KNOX 1954
FULLER, Dr. & Mrs. H. W., 710 Forest Heights Drive, Knoxville, TN 37919 KNOX 1981
FUNKHOUSER, Elizabeth, Apt. 8, 806 Morningside Dr., Johnson City, TN 37604 HERN 1983
FUQUA, Dr. & Mrs. William G., Rt. 7, Pulaski Pike, Columbia, TN 38401 COL 1962
FURR, Tim & Mecky, 7925 Cross Pike, Germantown, TN 38138 MEM 1989
GARCELON, Mr. Merrill, 5484 Poplar Avenue, Memphis, TN 38119 MEM 1965
GARDLER, M/M Murray L., 7911 Cross Pike, Germantown, TN 38138 MEM 1987
GARRISON, M/M Michael A., Route 2, Box 1507, Unicoi, TN 37692 HERN 1987
GARST, Bob & Maria, 8112 Dogwood Villa Drive, Germantown, TN 38138 MEM 1989
GASTON, Mrs. Emmett L., 109 Oak Hill Circle, Lebanon, TN 37087 SEL 1957
GATES, Miss Virginia, 3583 Norriswood, Memphis, TN 38111 MEM 1977
GAUT, M/M William King, Rt. 8, Box 362, Greeneville, TN 37743 GRE 1962
GELPI, Mrs. William J., 3128 Windsor Garden Drive, Antioch, TN 37013 SEL 1990
GILBERT, Ms. Debbie, 2340 Forrest, Memphis, TN 38112 MEM 1988
GILLAND, M/M Jim, 5412 Heritage Lane, Kingsport, TN 37664 TAL 1978
GILLIAM, Mrs. Katherine, 107 S. Ramsey, Manchester, TN 37355 HR 1987
GILMER, Mr. Brice, 957 Bluff View Dr., Knoxville, TN 37919 KNOX 1978
GLANTZ, M/M Timothy M., P. O. Box 399, S. Ridgewater, VA 22812-0399 CHAT 1986
GLEAVES, M/M Edwin, 401 Bowling Ave., Apt. #17, Nashville, TN 37205 NASH 1982
GOINS, M/M Lee Roy, 402 Dell Trail, Dunlap, TN 37327 CHAT 1982
GOOCH, Jr., M/M Robert D., 2900 Garden Lane, Memphis, TN 38111 MEM 1973
GOODIN, Mrs. John, 1300 Virginia, Johnson City, TN 37601 HERN 1973
GOODMAN, Mr. Harvey L., 1805 Tanager Lane, Knoxville, TN 37919 KNOX 1990
GOODPASTURE, M/M Henry, 3800 Whitland Ave., Nashville, TN 37205 NASH 1940
GOSE, Mrs. Dorothy, 122 Edgewood Drive, Bristol, VA 24201 BRI 1989
GRAHAM M/M Dewey L., 956 Lawson Street, Chattanooga, TN 37415 CHAT 1987
GRANTHAM, Louise, 3716 Bakertown Rd., Nashville, TN 37211 NASH 1982
GRAVES, M/M James H., Penfield Library, SUNY Oswego, Oswego, NY 13126 CORR 1979
GRAY, Dr. & Mrs. Dan R., 5004 Mt. Pleasant Pike, Columbia, TN 38401 COL 1962
GREEN, Mrs. Margaret S., 617 Meadow Road, Mt. Pleasant, TN 38474 COL 1984
GREEN, Martha E., 4507 Belmont Park Terrace, Nashville, TN 37215 NASH 1980
GREENE, Gail, 194 Mt. Orange Road, Trenton, TN 38382 JAC 1990
GREENE, Mark, 194 Mt. Orange Road, Trenton, TN 38382 MEM 1989
GREENE, Mrs. Sarah, Meadowview Apts. G-12,
801 Del Rio Pike, Franklin, TN 37064-2114 NASH 1929
GREGORY, M/M Rick, 820 Castle Heights Avenue, Lebanon, TN 37087-4016 SEL 1986
GRIGGS, M/M Glenn, 114 Guard Dr., Lawrenceburg, TN 38464 BR 1978
GRIMES, Mr. Samuel A., 4627 Peachtree Cir. Ea., Jacksonville, FL 32207 CORR 1962
GRIMM, M/M Billy C., 5490 Benna Cove, Memphis, TN 38119 MEM 1967
GROSS, Dorothy S., 5126 Sequoia, Memphis, TN 38117 MEM 1980
GUINN, M/M Joe B., 8382 Davenport Cove, Germantown, TN 38138 MEM 1975
GUSCHKE, M/M Thomas, 12930 LaRochelle Circle, Palm Beach Gard., FL 33410 NASH 1978
GUTSHALL, M/M Russell, 153 Gardner Street, Chattanooga, TN 37411 CHAT 1988
HACKNEY, Mr. Mark S., 2321 Carter Avenue, Nashville, TN 37206 NASH 1988
HALE, M/M Bert D., 223 Sharps Hollow Road, Bluff City, TN 37618 BRI 1977
HALE, M/M Kenneth, 3004 Shelby Street, Apt. 318, Bristol, TN 37620 BRI 1972
HALL, Edith, 4529 Topside Drive, S. W. Knoxville, TN 37920 KNOX 1984
HALL, Dr. George A., Department of Chemistry,
West Virginia University, Morgantown, WV 26506 CORR 1962

HALL, Mr. George, 2926 Emery Drive, Donelson, TN 37214 NASH 1990
HALL, Mr. Gordon E., Rt. 1, Box 224, Kodak, TN 37764 KNOX 1979
HALL, Julia E., 697 Anderson, Memphis, TN 38104 MEM 1981
HALL, II, Mr. Robert G., Box 16223 U. T. Station, Knoxville, TN 37996-4900 KNOX 1988
HAMEL, Dr. Paul B., 928 Gale Lane, Nashville, TN 37204-3014 NASH 1985
HAMMER, M/M Don, 1270 Orchard Rd., Norris, TN 37828 KNOX 1981
HAMMOND, M/M Brad, 2411 Pulaski Pike, Columbia, TN 38401 COL 1988
HAMMOND, Ms. Ellen, 405 Graham Street, Chattanooga, TN 37405 CHAT 1990
HAMMONDS, M/M R. Glenn, 4204 Estes Road, Nashville, TN 37215 NASH 1984
HANCOCK, Mr. James W., 235 Beagle Park Loop, Madisonville, KY 42431-9701 CORR 1946
HANDEL, M/M Stephen, 3620 Woodlawn School Road, Knoxville, TN 37920 KNOX 1988
HANNA, Johnny & Dorenda, 2576 Shepherdwood Lane, Germantown, TN 38138 MEM 1989
HANNABASS, Mr. H. Hayden, 1733 Orchard Court, Kingsport, TN 37660 TAL 1976
HANSON, Jr., Mr. Newton F., 1301 Highland Drive, Newport, AR 72112 CORR 1941
HARDMAN, Dr. & Mrs. Joel S., Route #1, Box 152, Primm Springs, TN 38476 NASH 1953
HARPER, Mr. James Marvin, 305 Crestwood Drive, Tullahoma, TN 37388-2923 HR 1979
HARPER, Mrs. Marjory B., 305 Crestwood Drive, Tullahoma, TN 37388 HR 1973
HARRELL, Mr. Jack, 1367 N. Parkway, Memphis, TN 38104 MEM 1990
HARRIS, Barbara, 2225 Pinewood Road, Nashville, TN 37216 NASH 1978
HARRIS, Mr. Mark, 3811 Taliluna Avenue SW, Knoxville, TN 37919 KNOX 1989
HARRIS, Mr. Paul C., 4519 Cloverdale Loop, Hixson, TN 37343 CHAT 1982
HARRIS, Mrs. Ray F., 2232 Haven Crest Drive, Chattanooga, TN 37421-2810 CHAT 1980
HARRIS, Mr. Van, 435 N. McNeil St., Memphis, TN 38112 MEM 1974
HARRIS, Wm. J. & Barbara, 1667 Hollywood Drive, Jackson, TN 38305 JAC 1990
HARRIS, III, Dr. & Mrs. Robert W., 3811 Taliluna Ave., Knoxville, TN 37919 KNOX 1972
HARSSON, Joyce, 400 S. Highland, Jackson, TN 38301 JAC 1990
HARTIGAN, Mr. Paul D., 824 Thomas Circle, Seymour, TN 37865 KNOX 1978
HASBROUCK, Mr. Charles B., 661 Rock Springs Road, Kingsport, TN 37664 TAL 1981
HASSELL, Sara S., 4 Driftwood Cove, Jackson, TN 38305 JAC 1990
HASSLER, Mr. John D., Route 1, Box 164-A, Byrdstown, TN 38549 TAL 1967
HASSLER, Ms. Robbie C., (Mrs. John D.), Rt. 1, Box 65, Byrdstown, TN 38549 TAL 1967
HATCHER, Robert M., 324 Leopole Rd., Nashville, TN 37211 NASH 1979
HAWKINS, Michael & Carol, Route 4, Box 339, Cookeville, TN 38501 TAL 1988
HAWKS, Mr. Graham, & MANN, Ms. Louie,
502 Signal Mountain Blvd., Signal Mountain, TN 37377 CHAT 1983
HAYES, Mrs. J. Mitchell, Route 6, Box 219, Pope Lane, Dickson, TN 37055 NASH 1963
HAYES, Susan, 201 E. Lafayette Street, Jackson, TN 38301 JAC 1990
HAYES, Wanda H., 825 Skyline Drive, Jackson, TN 38301 JAC 1990
HAYNES, Mrs. W. D., 1014 N. Maple St., Murfreesboro, TN 37130 MURF 1970
HECKERT, M/M Lenard, Route 8, Box 386, Greeneville, TN 37743 GRE 1984
HEGLER, Mr. Richard, Route 8, Box 603, Apt. 7, Johnson City, TN 37601 HERN 1981
HEIGHT, Allen & Helen, 40 Beechwood Drive, Jackson, TN 38301 JAC 1990
HEILMAN, Annie, 429 Rivermont Drive, Clarksville, TN 37043 NASH 1983
HEILMAN, Mrs. Nita, 429 Rivermont Drive, Clarksville, TN 37043 NASH 1988
HEINTZ, Dr./Mrs. Richard, 2171 Cordes Road, Germantown, TN 38138 MEM 1981
HENDERSON, Mr. Dan, 99 N. Main, No. 1501, Memphis, TN 38103 MEM 1990
HENDERSON, Mr. Ralph John, 7323 Fairington Circle, Hixson, TN 37343 CHAT 1984
HENDRICKS, Sheila Y., 4805 Torbay Drive, Nashville, TN 37211-4805 NASH 1979
HENGER, Mr. John W., 407 North Maple Street, Maryville, TN 37801 KNOX 1989
HENRY, Miss Janet M., 2533 Elms Court, Apt. 1, Memphis, TN 38128 MEM 1984
HERBERT, M/M John S. Unknown NASH 1960
HEREFORD, M/M Kenneth M., 2440 Haven Cove, Chattanooga, TN 37241 CHAT 1989
HERNANDEZ, M/M Frank, Route #2, Box 415,
Parkway Road, Tullahoma, TN 37388 HR 1985

HERNDON, Mrs. Lee R., 500-C West F Street, Elizabethton, TN 37643 HERN 1944
HERRING, Mrs. Bettie L., 1810 Diana Street, Murfreesboro, TN 37130 MURF 1987
HERVIG, Mr. Don, 210 Mac's Lane, Tullahoma, TN 37388 HR 1989
HETTISH, Mrs. Anne L., 1018 Lawndale Dr., Murfreesboro, TN 37129 MURF 1967
HETTISH, Mr. J. Robert, 1018 Lawndale Dr., Murfreesboro, TN 37129 MURF 1967
HETZLER, M/M W. Fred, 4600 Wilson Rd., Signal Mountain, TN 37377 CHAT 1975
HIGGS, Dr. James G., 91 Channing Way, Jackson, TN 38305 MEM 1979
HILL, Jim & Elaine, 1320 Sunset Drive, Signal Mountain, TN 37377 CHAT 1989
HINSHILWOOD, Mr. Milton, 523 Morrell Road, Knoxville, TN 37919 KNOX 1988
HINTON, Erin, 103 Hardwick Place, Oak Ridge, TN 37830 KNOX 1990
HOFF, M/M Ronald D., 4523 McCloud Rd., Knoxville, TN 37938 KNOX 1980
HOLLIS, Mary, Box 444, Meridian, MS 39302 CORR 1988
HOLLISTER, Dr. Robert M., 316 Battle Avenue, Franklin, TN 37064 NASH 1966
HOLT, Dr. & Mrs. B. D., 312 N. Main St., Greeneville, TN 37743 GRE 1983
HOLT, M/M James, 311 Colonial Circle, Greeneville, TN 37743 GRE 1988
HONAKER, Mr. Carl, 1329 Francis Station Knoxville, TN 37923 KNOX 1986
HONICK, Dr. Murray C. & LAMM, Dr. Renee R.,
157 Woodside Lane, Dyersburg, TN 38024 MEM 1988
HOPKINS, Miss Pamilla, 378 Normandy Circle, Nashville, TN 37209 NASH 1985
HORNSBY, Dr. Robert, 1723 Dover Street, Murfreesboro, TN 37130 MURF 1989
HOSFORD, Mr. Darryl, P. O. Box 1364, Collegedale, TN 37731 CHAT 1989
HOSIER, M/M Robert, 712 W. Spring Street, Lebanon, TN 37087 SEL 1976
HOSLER, M/M Richard A., 8107 Thornewood Drive, Hixson, TN 37343 CHAT 1987
HOUK, Mrs. Ann M., 2815 22nd Avenue, S., Nashville, TN 37215 NASH 1976
HOWARD, Rev.& Mrs. J. N., 123 Hilltop Drive, Chattanooga, TN 37411 CHAT 1986
HOWELL, Mr. David, 1730 Winding Ridge Tr., Knoxville, TN 37922 KNOX 1988
HOWELL, Dr. & Mrs. Joseph C., 5000 Oak Ridge Hwy.,
Apt. 1401, Knoxville, TN 37921 KNOX 1947
HOYLE, Susan, 1329 Cherokee Blvd., Knoxville, TN 37919 KNOX 1965
HUDSON, Mrs. Jack, 310 Lattawoods, Dyersburg, TN 38024 TAL 1966
HUGHES, Dr. & Mrs. C. Richard, 3878 Jill St. NE, Cleveland, TN 37312 CHAT 1982
HUGHES, Mrs. Leona, Route 4, Box 920,
N. Shackle Island Road, Hendersonville, TN 37075 NASH 1966
HUGHES, Mrs. Orville M., Route 1, Box 452,
Shackle Island Road, Hendersonville, TN 37075 NASH 1966
HUNTER, Mrs. Wilma, Route 6, Box 69, Murfreesboro, TN 37130 MURF 1970
HURLEY, Mr. Don, 549 Rollingwood Drive, Stone Mtn., GA 30087 KNOX 1983
HURLEY, Mr. Len, 484 Cherokee Blvd., Knoxville, TN 37919 KNOX 1969
ILARDI, Dr./Mrs. Robert, 2786 North Star Dr., Memphis, TN 38134 MEM 1983
INGLES, M/M Jerry, S. P. O. 1245, Sewanee, TN 37375 CHAT 1982
IRION, III M/M Clifford, 6610 Cedarbrook Lane, #3, Memphis, TN 38134 MEM 1984
IRWIN, Mr. Maxey, Hearthwood C1, Sparta, TN 38583 NASH 1983
JACKSON, Dr. Greg D., 2220 Baneberry Drive, Birmingham, AL 35244 CORR 1988
JACKSON, Dr. Jerome A., Dept. of Zoology, Mississippi
State Univ., P. O. Drawer Z, Mississippi St MS 39762 CORR 1972
JACKSON, Miss Louise, 5048 Lakeview Drive, Nashville, TN 37220 NASH 1964
JACOBSON, Mr. Daniel R., 5614 Cold Springs Road, Hixson, TN 37343 TAL 1970
JAMIESON, Mr. Dale, 14 Larimer Drive, Jackson, TN 38301 JAC 1990
JAMISON, Dr. & Mrs. King, 737 Taylor Street, Bristol, TN 37620 BRI 1990
JANZEN, Mr. William R., 908 Laurel Hill Road, Knoxville, TN 37923 KNOX 1989
JEMISON, Dr. & Mrs. John M., 8354 Bergin Drive, Cordova, TN 38018 MEM 1989
JENKINS, Mr. Albert M., 2106 Wisteria Dr., Hixson, TN 37343 CHAT 1976
JENKINS, Mrs. Albertine J., 1203 Hillsboro Hwy., Manchester, TN 37355 HR 1988
JENKINS, Mr. George, 8515 Scaley Bank Circle, Ooltewah, TN 37363 CHAT 1989

JENKINS, M/M Ken, Route 1, Box 416, Gatlinburg, TN 37738 KNOX 1987
JENNINGS, Dawn McKibbon, 1145 Dixon Drive, Gainesville, GA 30501-2920 CORR 1988
JENNINGS, Ms. Sara, 5031 Griffins Gate Lane, Knoxville, TN 37912 KNOX 1986
JERNIGAN, Dr. & Mrs. William N., 107 Gallion Dr., Columbia, TN 38401 COL 1980
JOHNSON, Mrs. Amy, 1165 Park Drive, Cookeville, TN 38501 TAL 1958
JOHNSON, M/M David M., Riverview Drive,
Route 3, Box 323 Maryville, TN 37801 KNOX 1989
JOHNSON, M/M Edwin, 4527 Topside Rd., Rt. 23, Knoxville, TN 37920-6055 KNOX 1983
JOHNSTON, M/M Jeff, 11916 Couch Mill Road, Knoxville, TN 37932 KNOX 1987
JOLLY, Mr. Edgar L., 4003 Nevada Avenue, Nashville, TN 37209 NASH 1978
JONES, Dr. & Mrs. Russell A., 606 Rockdale, Cleburne, TX 76031 MEM 1975
JONES, Ms. Sarah Elizabeth, 23 Y Georgetown,
5025 Hillsboro Road, Nashville, TN 37215 NASH 1983
JONES, III, M/M Walk C., 259 E. Cherry Circle, Memphis, TN 38117 MEM 1981
JONES, Mr. William J., TN Technological Univ., Box 5172 Cookeville, TN 38501 TAL 1983
JONES, Jr., Col.& Mrs. Joseph W., Route 1, Box 207,
Pate Road, Newbern, TN 38059 TAL 1975
JORDAN, Mr. Burt, P. O. Box 1332, Knoxville, TN 37901 KNOX 1989
JORDAN, Mr. O. Ray, Department of Biology,
Box 5063 TTU, Cookeville, TN 38501 UC 1966
JOYNER, Miss Imogene, 5311 Mesquite Road, Memphis, TN 38119 MEM 1986
JUSTICE, Mrs. John W., 2704 Shannon Drive, Murfreesboro, TN 37129 MURF 1973
KAFKA, M/M Lenny, 1607 Oaken Trail, Chattanooga, TN 37421 CHAT 1983
KASERMAN, Alice, 5024 Jacksboro Pike, #6, Knoxville, TN 37916 KNOX 1990
KASET, M/M Melvin, 3907 Daleview Terrace, Chattanooga, TN 37411 CHAT 1987
KAY, Ms. Nola, Route 3, London Lane, Ringgold, GA 30736 CHAT 1989
KEDGE, Leslie R., 1022 Meadowview Drive, Fairfield Glade, TN 38555 CUMB 1989
KEETON, Mr. Luther F., 80 Eastland Dr., Memphis, TN 38111 MEM 1940
KELLAR, Ms. Alice S., 519 West 1st Ave., Lenoir City, TN 37771 CHAT 1981
KELLY, Barbara A., 3524 Pinellas Ln., Chattanooga, TN 37412 CHAT 1978
KELLY, Ms. Sue, 264 N. McNeil, Memphis, TN 38112 MEM 1990
KESLER, Dr. & Mrs. David, 775 Center Drive, Memphis, TN 38112 MEM 1990
KILLEBREW, Mrs. Linda S., Route 4, Box 56, Lebanon, TN 37087 SEL 1986
KING, Mr. Edward M., 595 Shotwell, Memphis, TN 38111 MEM 1950
KING, Tom & Louise, 3716 Bakertown Road, Nashville, TN 37211 NASH 1990
KISNER, M/M James B., 9 Mary Ann Dr., Memphis, TN 38117 MEM 1977
KLEIN, Ms. Starr T., 217 Arrow Drive, Signal Mountain, TN 37377 CHAT 1980
KNEE, Martha C., 228 Masters Road, Hixson, TN 37343 CHAT 1988
KNIGHT, Mrs. Margaret S., Pleasant Manor Apts. #3,
412 North Main Street, Mt. Pleasant, TN 38474 COL 1983
KNIGHT, Mr. Richard Lee, 804 N. Hills Dr., Johnson City, TN 37604 HERN 1977
KOEHLER, M/M George, 512 Lynnwood Blvd., Nashville, TN 37205 NASH 1990
KOELLA, Tony, P. O. Box 1680, Maryville, TN 37801 KNOX 1967
KRACKER, Jacqueline L, and TAYLOR, Paul Allen,
Route 2, Box 352, Kingston, TN 37763 KNOX 1989
KRAMER, Dr. & Mrs. Lee F., 321 Shepherd Hills Drive, Madison, TN 37115 NASH 1966
KRAMER, Pete & Mary Lou, Station 23, Livingston Univ., Livingston, AL 35470 MEM 1988
KROODSMA, Mr. Roger L., 113 N. Seneca Road, Oak Ridge, TN 37830 KNOX 1988
KUNKEL, Kieth & Peggy, 5369 Pipers Gap, Memphis, TN 38134 MEM 1990
KUNTZMAN, Jr., Mr. Art, 4693 St. Elmo, Memphis, TN 38128 MEM 1988
KURTZ, M/M William L., 3701 Skylark Trail, Chattanooga, TN 37416 CHAT 1982
KUYKENDALL, Dr. & Mrs. Sam J., 1394 Hatcher Lane, Columbia, TN 38401 NASH 1976
LACY, Miss Beth, 3129 McClure Lane, S.E., Knoxville, TN 37920 KNOX 1955
LAGERBERG, Mr. Gregg N., 9141 Wesley Place Drive, Knoxville, TN 37922 KNOX 1981

LANDERS, Ms. Jean L., 4108 N. Tacoma Ave., Chattanooga, TN 37415 CHAT 1984
LANE, M/M Joe E., 101 Clark Drive, Mt. Juliet, TN 37122 SEL 1988
LANE, M/M William E., 1025 South Seminole Drive, Chattanooga, TN 37412 CHAT 1988
LANGRIDGE, Mr. H. P., 1421 W. Ocean Avenue, Lantana, FL 33462 HERN 1989
LATREMORE, M/M Fred S., 1030 Westwood Drive, Tullahoma, TN 37388 HR 1978
LAVELY, Jr., M/M Horace T., 5928 Sedberry Road, Nashville, TN 37205 NASH 1978
LAY, Dr. & Mrs. Allyn, Rt. 7, Box 24-A, Pulaski Pike, Columbia, TN 38401 COL 1981
LEGGETT, M/M Kenneth, P. O. Box 1609, Dyersburg, TN 38025-1609 MEM 1967
LEMON, Ms. Juanelle, 1803 Tutwiler, Memphis, TN 38107 MEM 1989
LENHERT, Dr. Galen, 3109 Overlook Drive, Nashville, TN 37212 NASH 1986
LERNER, Natalie, 122 Matthew Lane, Nashville, TN 37215 NASH 1985
LEVERETT, Ms. Heather, 163 Bass Drive, Mt. Juliet, TN 37122 NASH 1989
LEVY, M/M Henri, 116 Meadow Road, Oak Ridge, TN 37830 KNOX 1985
LEVY, Jr., M/M Ralph, 6125 Green Meadows, Memphis, TN 38119 MEM 1980
LEWIS, M/M Marshall, 155 Cherry Road, Memphis, TN 38117 MEM 1974
LEWIS, Mr. Richard, 407 V. I. Branch Road, Bristol, TN 37620 HERN 1974
LITTLE, Selena, 506 Factory Street, Trenton, TN 38382 JAC 1990
LOCHRIDGE, M/M Owen Bedford, 914 Wooldridge Drive, Columbia, TN 38401 COL 1974
LONG, Dr. & Mrs. Charles E., 1203 Poplar Avenue, Memphis, TN 38104 MEM 1984
LOVELL, Mr. Scott, 6005 Andover Drive, Nashville, TN 37215 NASH 1990
LUCKADO, Mrs. Tom R., 937 McKellar Drive, Tullahoma, TN 37388 HR 1970
LUNDSTROM, Kenneth W., 4010 Iroquois Avenue, Nashville, TN 37205 NASH 1990
LYLES, M/M Henry, Rt. 6, Mooresville Pike, Columbia, TN 38401 COL 1974
LYON, M/M Charles A., 4002 Wallace Lane, Nashville, TN 37215 NASH 1975
LYONS, M/M Robert S., 600 Marr Dr., Signal Mountain, TN 37377 CHAT 1983
MACKEY, Ms. Erma, P. O. Box 604, Lebanon, TN 37087 SEL 1986
MANESS, Mrs. Ray J., 101 Larchmont Avenue, Chattanooga, TN 37411 CHAT 1988
MANIER, III, Mr. William R., P. O. Box 150668, Nashville, TN 37215 NASH 1990
MANLEY, Mrs. Frances W., 10317 Long Rd., Arlington, TN 38002 MEM 1961
MANN, M/M E. L., 110 Springer Rd., Lawrenceburg, TN 38464 BR 1983
MANN, Mrs. Margaret Louise, P. O. Box 140038, Nashville, TN 37214 NASH 1966
MANNING, Ms. Billie D., 1701 N. Concord Road, Apt. 33, Chattanooga, TN 37421 CHAT 1990
MANNING, G. H., Route 1, Box 303 McKenzie, TN 38201 TAL 1970
MANNS, Mr. Robert, 877 Glenbrook Dr., Atlanta, GA 30318 KNOX 1986
MARCROM, H. D., 433 W. Fort St., Manchester, TN 37355 HR 1974
MARTIN, Rev.& Mrs. John L., 641 Ridgefield Rd., Elizabethton, TN 37643 HERN 1971
MARTIN, Mr. Knox, 1176 Dearing Road, Memphis, TN 38117 MEM 1986
MARTIN, Ms. Patricia M., 1742 Rigsby Avenue, Murfreesboro, TN 37129 MURF 1974
MARTIN, M/M William T., P. O. Box 52393, Knoxville, TN 37950 KNOX 1986
MARTINEZ, M/M Joe, 1101 Bragg Circle, Tullahoma, TN 37388 HR 1988
MASCUCH, M/M Paul G., Route 2, Box 393-A, Englewood, TN 37329 CHAT 1986
MASON, M/M James David, 2115 Terrace Ave., S.W., Knoxville, TN 37916 KNOX 1981
MASON, M/M James H., Route 15, Box 441, W.Terre Haute, IN 47885 KNOX 1984
MASSEY, M/M Chester A., 1478 Touraine Place, Knoxville, TN 37919 KNOX 1989
MASSEY, Mr. James Morton, 1100 Bridgestone Place, Knoxville, TN 37919 KNOX 1985
MASUOKA, Dr. & Mrs. Jitsuichi, 2609 Natchez Trace, Nashville, TN 37212 NASH 1971
MAY, Dr. Jonathan E., 2517 W. Linden Avenue, Nashville, TN 37212 NASH 1982
MAYFIELD, Dr. & Mrs. George S., 999 Sunnyside Drive, Columbia, TN 38401 COL 1961
MAYFIELD, Sr. Mrs. George, R., c/o Dr. George R. Mayfield, Jr.,
999 Sunnyside Drive, Columbia, TN 38401 NASH 1916
MEADORS, M/M Howard, 109 Cleveland Rd., Rossville, GA 30741 CHAT 1958
MEADOWS, Lee & Nell, 311 Edgewod Avenue, Mt. Pleasant, TN 38474 COL 1989
MEAGHER, Ruby R., 808 Riverview Drive, Elizabethton, TN 37643 HERN 1988
MEDLEY, M/M Lee W., Rt. 2, Box 173 B, Hillsboro, TN 37342 HR 1982

MEEKS, Dr./Mrs. G. Gregory, 3296 Elmore Park Road, Memphis, TN 38134 MEM 1978
MEIER, Ms. Kathleen M. 2360 Forrest Ave., Apt. 1, Memphis, TN 38112 MEM 1989
MENGEL, M/M J. T., 1113 Carol Woods, Chapel Hill, NC 27514 KNOX 1987
MERYWEATHER, Ms. Mary V., 59 Wilshire Heights, Fairfield Glade, TN 38555 CUMB 1988
MICHAELS, Ms. Kate, 4235 River Chase, Millington, TN 38053 MEM 1990
MILLER, Dr. & Mrs. Clay, 908 Hillcrest Avenue, Columbia, TN 38401 COL 1982
MILLER, Mr. Dwight, 2196 Nelson, Memphis, TN 38104-5760 MEM 1981
MILLER, Ethelyn D., 707 Fairway Dr., Elizabethton, TN 37643 HERN 1983
MILLER, Mrs. Marie, Route 1, Box 327-A,
Colbert Hollow Road, Rock Springs, GA 30739 CHAT 1984
MILLIKEN, Jr., M/M William, 861 Vaughn Rd., Clarksville, TN 37043 NASH 1984
MINKLER, Ms. Dorothy, Route 1, Box 143, Tracy City, TN 37387 HR 1988
MISTAK, Mr. Bob, 3306 Patty Road, Maryville, TN 37801 KNOX 1987
MITCHELL, M/M Ezekiel, Route 12, Box 12720, Ringgold, GA 30736 CHAT 1988
MITCHELL, Mr. Robert J., 683 E. Parkway S., Apt. 2 Memphis, TN 38104 MEM 1985
MOMROE, Mrs. Sharon, 1101 Stonewall Jackson Court, Nashville, TN 37220 NASH 1990
MONROE, Dr. Burt L., P. O. Box 23447, Anchorage, KY 40223 CORR 1969
MOORE, Miss Nelle, 3535 Kirby Road, K223, Memphis, TN 38115 MEM 1944
MOORE, M/M Robert E., Route 1, Box 2074,
Elmbrook Drive, Rockford, TN 37853 KNOX 1983
MOOSE, M/M Foster, 3535 Kirby Road, #J102, Memphis, TN 38115-3721 MEM 1978
MORRIS, M/M A. C., 891 W. Outer Drive, Oak Ridge, TN 37830 KNOX 1987
MORRIS, Beverly S. & Fam., Route 6, Box 328,
Old Mill Road, Ringgold, GA 30736 CHAT 1988
MORTON, Ms. Gay H., 7941 Hill Road, Knoxville, TN 37918 KNOX 1988
MUDGE, Jr., Mr. E. W., 9550 Forest Lane, Suite 227, Dallas, TX 75243-5905 CORR 1967
MUMME, Dr. Ron, Dept. of Biology, Memphis State
University, Memphis, TN 38152 MEM 1985
MURCHISON, Ann, 2 Deepwood, Jackson, TN 38305 JAC 1990
MURPHY, Mr. Marty, 5703 Collette Road, Knoxville, TN 37918 KNOX 1990
MYERS, Jr., M/M Thomas L., 1200 New Fane Circle, Knoxville, TN 37922 KNOX 1987
MacMILLAN, Mrs. Portia R., 3201 Overlook Drive, Nashville, TN 37212 NASH 1965
McCALLIE, Mr. Jack B., 1818 Crestwood Drive, Chattanooga, TN 37415 CHAT 1988
McCAMEY, Dr. Franklin, Route 2, Box 2974, Dawsonville, GA 30534 CORR 1931
McCARROLL, Mr. David M., 1014 Grantland, Murfreesboro, TN 37129 MURF 1985
McCAULEY, Mr. Eugene L., 12 Young Street, Jackson, TN 38301 JAC 1990
McCLURE, M/M John R., 6650 Sandwood Circle, Harrison, TN 37341 CHAT 1988
McCONNELL, M/M Chester, Rt. 6, Box 212, Lawrenceburg, TN 38464 BR 1981
McCRARY, Dr. Charles W., 1561 Vinton, Memphis, TN 38104 MEM 1980
McDADE, Mr. Arthur, U. S. Park Ranger, Shiloh
National Park, Shiloh, TN 38376 COL 1989
McDANIEL, Evelyn W., 808 Laurie St., Maryville, TN 37801 KNOX 1985
McFARLAND, Mrs. Sam B., 242 East Spring Street, Lebanon, TN 37087 SEL 1966
McFARLIN, Mr. Larry, 108 N. Spring Street, Murfreesboro, TN 37130 MURF 1981
McGOWN, M/M George W., 236 Whettier Ln.,
Hartland Estates, Oliver Springs, TN 37840 KNOX 1958
McGURK, Ms. Deane, 2601 Hillsboro Road, Apt. D-1, Nashville, TN 37212 NASH 1986
McKINNEY, Miss Crystal Ann, 1420 Windbrook Lane, Hixson, TN 37343 CHAT 1990
McKINNEY, Evelyn White, 5703 Cassandra Smith Road, Hixson, TN 37343 CHAT 1987
McLAUGHLIN, Dr. & Mrs. Joe, 5515 Wakefield Drive, Brentwood, TN 37027-4405 NASH 1978
McLAUGHLIN, Mr. John M., 1755 Cherry Lane, St. Cloud, MN 56301 NASH 1978
McLEROY, M/M Ralph, 3724 Keowee Avenue, Knoxville, TN 37919 KNOX 1965
McMAHAN M/M Michael A., 1132 Ridge Top Dr., Chattanooga, TN 37421 CHAT 1981
McMILLAN, M/M Melville, Route 2, Box 141, Lascassas, TN 37085 SEL 1970

McNAIR, Mr. Douglas Branch, 303 Robinson Street, Rockingham, NC 28379 CORR 1988
McNUTT, Jr., M/M William P., 11478 North Couch Mill Rd., Knoxville, TN 37931 KNOX 1974
McPHERSON, Mr. Charles E., Rt. 1, Box 522, Brighton, TN 38011 MEM 1951
McWHIRTER, M/M Mac, 4962 Gwynne Road, Memphis, TN 38117-3302 MEM 1982
McWHORTER, Mrs. J. H., 3829 West Oak Way, S.W., Huntsville, AL 35805 MEM 1946
NANCE, Mrs. Dorothy Clay, 526 Academy Drive, Lawrenceburg, TN 38464 BR 1990
NEAL, M/M William F., Route 11, Box 292, Cleveland, TN 37311 CHAT 1987
NEIDERT, M/M Edward, Box 133, Loretto, TN 38469 BR 1980
NEIDERT, M/M William Royce, Rt. #1, Box 97-A, Loretto, TN 38469 BR 1982
NEVIUS, M/M Richard, Rt. 6, Box 355 Greeneville, TN 37743 GRE 1937
NEWELL, Mrs. Jane, P. O. Box 177, Loretto, TN 38469 BR 1989
NEWTON, M/M Richard Y., 522 Indian Lake Road, Hendersonville TN 37075 NASH 1981
NICHOLSON, Mr. Charles P., P. O. Box 402, Norris, TN 37828-0402 KNOX 1971
NICHOLSON, Jr. M/M E. L., 6806 Haverhill Dr., Knoxville, TN 37919 KNOX 1983
NIEVES, M/M Dan, 103 Old Indian Hill Trail, Greeneville, TN 37743 GRE 1985
NIXON, M/M Robert, 10 Peach Blossom Square, Nashville, TN 37205 NASH 1982
NOLAN, Mrs. Sara, 2017 Sweetbriar Ave., Nashville, TN 37212 NASH 1970
NORMAN, Mr. James L., 502 N. 14th, Muskogee, OK 74401 CORR 1953
NORRIS, Ms. Chris K., 2937 Gaston Avenue, Knoxville, TN 37917 KNOX 1989
NORRIS, M/M Larry, 1609 Ponderossa Trail, Lebanon, TN 37087 SEL 1986
NORTH, Dr. & Mrs. William C., 369 Riverbluff, No. 1, Memphis, TN 38103 MEM 1984
NORTHROP, M/M Roy, P. O. Box 95, Mosheim, TN 37818 GRE 1986
NORVELL, Mrs. Annie Ruth, 904 Woodland Court, Manchester, TN 37355 HR 1988
NUNLEY, Ms. Diane, Box 299, Manchester, TN 37355 HR 1989
O'CONNER, Mrs. Elizabeth, 201 Cambridge Place, Franklin, TN 37064 NASH 1988
OAKES, Jane, 1212 Rolling Fields Drive, Columbia, TN 38401 COL 1987
ODEAR, Mr. Bob, 3901 Trimble Road, Nashville, TN 37215 NASH 1990
ODOM, Mrs. Eugene P., 1700 E. Main St., Murfreesboro, TN 37130 MURF 1970
ODOM, Jr., Mr. Thomas A., 3911 Inwood Drive, Kingsport, TN 37664 TAL 1974
OLSON, Mr. Bob & Family, 3503 Allandale, Memphis, TN 38111 MEM 1988
OLSON, Mrs. Margaret, 102 Maple Tree Drive, Bristol, TN 37620 BRI 1990
OLSON, Mr. W. C., 1107 Anita Drive, Chattanooga, TN 37411 CHAT 1986
OSBORN, Mrs. Charles, 201 Bartonwood Dr., Lebanon, TN 37087 SEL 1981
OVERTON, Mrs. Holly, 3316 Bunker Hill Dr., Knoxville, TN 37920 KNOX 1947
OWEN, Mr. J. B., 2324 Antietam Road, Knoxville, TN 37917 KNOX 1947
OWEN, Mrs. Vivian, c/o Hultman, 1822 N. Sedgwick, Chicago, IL 60614 MEM 1987
PABST, Mrs. Mary, R.R. 8, Box 399, Greeneville, TN 37743 GRE 1988
PALMER-BALL, Jr., Mr. Brainard, 8207 Old Westport Rd., Louisville, KY 40222 NASH 1983
PAPACHRISTOU, Dr. Gerald, 2858 Shelley Cove, Memphis, TN 38115 MEM 1975
PARDUE, M/M Paul S., Rt. 23, 4415 Beechwood Rd., Knoxville, TN 37920 KNOX 1953
PARKER, Miss Anna Mary, 4343 Lebanon Road, Apt. #421 Hermitage, TN 37076 HR 1976
PARKER, M/M F. Milton, 1111 Ridgecrest Rd., Johnson City, TN 37601 HERN 1982
PARKS, Mr. Johnny T., 1610 East 17th St., Chattanooga, TN 37404 CHAT 1979
PARSONS, Mr. C. E., 1525 Fay Street, Knoxville, TN 37921 KNOX 1986
PARTEE, Mrs. Margaret, Route 11, Box 356, Lebanon, TN 37087 SEL 1984
PATRICK, M/M Oscar, 4641 Villa Green Dr., Nashville, TN 37215 NASH 1969
PATTERSON, Ms. Martha L., P. O. Box 1060 Kingston, TN 37763 KNOX 1988
PATTERSON, Martha L., 221 Dinwiddie Avenue, Madison, TN 37115-2462 NASH 1981
PATTI, Ms. Shirley, 4450 Princeton, Memphis, TN 38117 MEM 1990
PATTON, M/M James T., 203 Timerlinks Dr., Signal Mountain, TN 37377 CHAT 1985
PATTON, Dr. John A., 2214 Riley Rd., Murfreesboro, TN 37130 MURF 1970
PAUL, Mr. Jack L., 1023 Devonshire Drive, Fairfield Glade, TN 38555 CUMB 1988
PAYNE, Jr., Mr. George R., 5834 Edgewater Cove #2, Memphis, TN 38134-9147 MEM 1970
PAYNE, Jr., Mrs. George R., 5834 Edgewater Cove #2, Memphis, TN 38134-9147 MEM 1989

PEACHER-RYAN, Holmes & Carla, 3181 Douglass, Memphis, TN 38111 MEM 1988
PEAKE, Dr. & Mrs. Richard H., Clinch Valley College, Box 28, Wise, VA 24293 CORR 1964
PEEBLES, M/M J. Howell, 310 Old Fort Street, Tullahoma, TN 37388 HR 1981
PEEPLES, Mr. W. Robert, 150 Bendel Circle, Memphis, TN 38117 MEM 1978
PEEPLES, M/M William P., 150 Bendel Circle, Memphis, TN 38117 MEM 1978
PETERS, Dr. James R., SPO 1229, Univ. of the South, Sewanee, TN 37375 CHAT 1986
PETERS, Ms. Suevelyn W., 761 Elysian Fields Road, Nashville, TN 37204 NASH 1989
PETERSON, Mr. Norman O., 850 Snead Drive, Fairfield Glade, TN 38555 CUMB 1988
PETREY, Karen, 2511 Legion Drive, Knoxville, TN 37920 KNOX 1990
PETTINGILL, Jr., Dr. Olin Sewall, Vermont Inst. of Natural
Science, Woodstock, VT 06091 CORR 1939
PHILLIPS, Dr. Allan R., Reforma 825-A, Col. Chapultepec,
San Nicolas de los Garza, 66450 Nuevo Leon, MEXICO CORR 1943
PHILLIPS, Col.& Mrs. Charles L., 2495 Shennandoah Dr., Chattanooga, TN 37421 CHAT 1975
PHILLIPS, Ms. Kay, 2012 Cedar Lane, Knoxville, TN 37919 KNOX 1986
PHILP, Mr. Robert, 628 West Brow Road, Lookout Mountain, TN 37350 CHAT 1988
PICKETT, Jeff & Pat, 5102 Kingswood Circle, Memphis, TN 38134 MEM 1988
PIERCE, M/M Robert L., 138 Cunningham Lane, Signal Mountain, TN 37377 CHAT 1987
PIERCE, M/M W. Crowell, 1005 Mountain Creek Road #518, Chattanooga, TN 37405 CHAT 1988
PILGRIM, Ms. Jean S., 116 Centru Street, Chattanooga, TN 37419 CHAT 1989
PINCKLEY, Mrs. Flavil W., 1005 West Gaines, Lawrenceburg, TN 38464 BR 1990
PITTS, Dr. & Mrs. T. David, Biology Dept., University of TN
at Martin, Martin, TN 38237 TAL 1965
POND, M/M John A., 5600 Brite Drive, Bethesda, MD 20817 MEM 1984
PORTER, Rev. Delton, 110 Hood Trail, Portland, TN 37148 COL 1989
POTTER, Ms. Mary Ann, 6102 Clark Rd., Harrison, TN 37341 CHAT 1971
POWELL, Mr. Sam H., 506 Brady Pt. Rd., Signal Mountain, TN 37377 CHAT 1989
POWELL, Jr., Mr. Albert L., 9122 Ky. 405, Maceo, KY 42355 CORR 1934
POWERS, Mr. C. Donald, P. O. Box 523, Las Vegas, NV 89109 KNOX 1985
POWERS, Mr. Walter Lee, P. O. Box 3, Tennessee Ridge, TN 37178 NASH 1990
PRESSNELL, M/M Allen, Route 6, Box 274 G, Columbia, TN 38401 COL 1976
PRESTON, Mr. Dick, Route 1, Box 87 K, Atoka, TN 38004 MEM 1989
PRICE, Mrs. Rachel A., 2619 Magill Avenue, Maryville, TN 37801 KNOX 1987
PRICE, Jr., Mrs. David, 1954 Old Hickory Blvd., Brentwood, TN 37027 NASH 1970
PRICHARD, Mr. Mack, Conservation Department,
701 Broadway, Room B-30, Nashville, TN 37219 NASH 1967
PRIDDY, M/M Forrest C., 8426 Thorgeson Cove, Cordova, TN 38018 MEM 1984
PRIGMORE, M/M James & Family, Rt. 2, Box 178, Trenton, GA 30736 CHAT 1985
PUCKETT, Ms. Millie, 501 Young Avenue, Chattanooga, TN 37405 CHAT 1990
PURYEAR, Mrs. William A., The St. Paul, Apt. 528,
5031 Hillsboro Pike, Nashville, TN 37215 NASH 1958
PYLE, Mr. Robert B., 3524 Pinellas Ln., Chattanooga, TN 37412 CHAT 1978
QUEENER, Elizabeth M., 3803 West End Avenue, #6, Nasvhille, TN 37205-2450 NASH 1978
RADFORD, Mr. John, 7138 Sylar Road, Ooltewah, TN 37363 CHAT 1989
RADIN, Ms. Elain, P. O. Box 171432, Memphis, TN 38117 MEM 1978
RAMEY, Martha Rast, 3355 Greenway, Horn Lake, MS 38637 MEM 1983
RAMM, M/M Heinrich J., 606 Larrymore St., Manchester, TN 37355 HR 1974
RAMSEY, Mr. Darrel, Route 3, Box 70, Lebanon, TN 37087 SEL 1990
RATLEDGE, M/M Doug, 1506 Sun Valley Dr., Greeneville, TN 37743 GRE 1977
RAYE, Mr. Larry D., 4020 Sunnybrooke, Nashville, TN 37205 NASH 1976
REDD, Mrs. Catherine, St. Charles Place,
Rt. 8, Box 8690, Manchester, TN 37355 HR 1988
REESE, M/M Joe, 1508 Fairview Drive, Mt. Juliet, TN 37122 SEL 1988
REEVES, Mr. Mark E., 8312 Mecklenburg Court, Knoxville, TN 37923-6719 KNOX 1980

RENFRO, Mr. James, 109 White Oak Drive, Lake Jackson, TX 77566 CORR 1983
RENTSCHLER, Jr., M/M George H., 1347 Gen. George Patton Road, Nashville, TN 37221-2446 NASH 1980
RESTIVO, M/M Ernest J., 1248 E. Crestwood Drive, Memphis, TN 38119 MEM 1968
REYNOLDS, Virginia, 4241 Waymar Drive, Memphis, TN 38117 MEM 1981
RICHARDS, Dr. & Mrs. 1209 Fredericksburg Drive, Johnson City, TN 37604 HERN 1989
RICHARDS, Mrs. L. D., 1921 Moran Drive, Nashville, TN 37216 NASH 1982
RIGGINS, M/M John N., 7408 Dunaway Drive, Nashville, TN 37221 TAL 1969
RITZHAULPT, Sukie & Don, 3809 Woodbine Cr., Cleveland, TN 37311 CHAT 1988
ROARK, Mrs. Martha L., 23 Sevier Street, Memphis, TN 38111 MEM 1973
ROBBINS, Mr. Chandler S., 7900 Brooklyn Bridge Rd., Laurel, MD 20707 CORR 1955
ROBBINS, Mr. G. D., 14 Brookside Drive, Oak Ridge, TN 37830 KNOX 1987
ROBERTSON, Mr. Charles W., P. O. Box 902, Collegedale, TN 37315 CHAT 1985
ROBINSON, Mr. John C., P. O. Box 1024, Hayward, WI 54843 CORR 1986
ROBINSON, Mr. Wendell Niel, 1408 Towson Drive, Columbia, TN 38401 COL 1987
RODEN, Ms. Rosemary, 7628 Mallette Road, Chattanooga, TN 37416 CHAT 1989
ROGERS, Mr. David P., 7123 Riverwood, Germantown, TN 38138 MEM 1980
ROGERS, Ronal & Tommie, 9003 Potomac Drive, Chattanooga, TN 37421 CHAT 1989
ROLLINS, M/M Charles D., 3120 Beechrun, Memphis, TN 38128 MEM 1975
ROOK, Ms. Jo, Rural Route 2, Box 260, Gatlinburg, TN 37738-9514 SEL 1989
ROSS, Dr. Anna, Christian Brothers College, 650 East Parkway South, Memphis, TN 38104 MEM 1988
ROTHBERGER, Mr. Mark G., 805 Mississippi Ave., Signal Mountain, TN 37377 CHAT 1987
ROUTLEDGE, M/M Larry F., 1218 Woodhaven Lane, Greeneville, TN 37743 GRE 1986
ROWELL, Mr. James D., 110 Sycamore Dr., Rossville, GA 30741 CHAT 1985
RUDD, M/M Robin, 7611 Davidson Rd., Chattanooga, TN 37421 CHAT 1983
RUDOLPH, Martha, NO ADDRESS KNOX 1989
RUSH, Mrs. Marty, 324 Belinda Parkway, Mt. Juliet, TN 37122 SEL 1986
RUSH, Jr., Mr. Donald L., 7119 Fine Lane, Harrison, TN 37341 CHAT 1989
RYON, M/M Michael G., 1414 Pine Springs Road, Knoxville, TN 37922 KNOX 1988
RYTHER, Mr. Eugene M., 905 Sterling Ave., Chattanooga, TN 37405 CHAT 1981
SANDERS, M/M Kenneth, 6712 Sevierville Pike, Knoxville, TN 37920 KNOX 1955
SANDS, Ms. Kay, 442 Lookout Drive, Eads, TN 38028-9737 MEM 1989
SARGENT, M/M Robert R., Route 1, Box 558G, Trussville, AL 35173 CHAT 1990
SATTERFIELD, M/M Stephen, Route 1, Box 312, Luttrell, TN 37779 KNOX 1983
SAULS, M/M R. Lynn, 2493 Allegheny Drive, Chattanooga, TN 37402 CHAT 1990
SAWYER, Mrs. Marguerite, 604 Estes Ave., Nashville, TN 37215 NASH 1962
SCHELL, Mr. Edward H., 2514 Browns Mill Road, Johnson City, TN 37601 HERN 1975
SCHILLING, Mrs. Beth, 5800 Rockwood Lane, Knoxville, TN 37921 KNOX 1988
SCHOPFER, Bettye, 585 S. Greer, Apt. 901, Memphis, TN 38111 MEM 1989
SCHREIBER, Jr., Mr. E. Dan, 3518 Pleasant Valley Road, Nashville, TN 37204 NASH 1960
SCHROTH, Katherine A., 421 Alexander, Memphis, TN 38111 MEM 1989
SCHULTZ, Mr. Wesley A., 620 S. Sanctuary Road, Chattanooga, TN 37412 CHAT 1990
SCOTT, Harold & Nancy, Route 9, Box 223, Columbia, TN 38401 COL 1989
SCOTT, III, Mr. Robert R., 7831 Luxmore Drive, Knoxville, TN 37919 KNOX 1987
SEARL, M/M Edwin N., 932 Kevin Rd., Knoxville, TN 37923 KNOX 1982
SEE, M/M Billy, 3636 Sparta Pike, Watertown, TN 37184 SEL 1982
SEE, Miss Ramona, 2725 Western Hills Drive, Nashville, TN 37214 SEL 1986
SELLARS, Mrs. John W., 122 Greenlawn Avenue, Lebanon, TN 37087 SEL 1969
SELLERS, Mrs. Donette C., 1504 Frances Street, Lawrenceburg, TN 38464 BR 1987
SENEKER, Rev.& Mrs. Francis Clay, 725 S. Germantown Circle, Chattanooga, TN 37412 CHAT 1986
SHACKLETT, Mr. Richard C., 1145 E. Clark Blvd., Murfreesboro, TN 37130 MURF 1990
SHARP, M/M A. Boyd, 245 Peters Rd., SW, Knoxville, TN 37923 KNOX 1968

SHARP, Mrs. Walter, 666 Beech Creek Road, Brentwood, TN 37027 NASH 1952
SHARP, Jr., Mr. Vernon, 1808 Wilson Pike, Brentwood, TN 37027 NASH 1921
SHAVER, Dr. & Mrs. David C., 130 Waring Road, Memphis, TN 38117 MEM 1979
SHELTON, M/M H. Clay, 4858 Shady Grove Road, Memphis, TN 38117 MEM 1979
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SHEPHERD, Mrs. Fran, 1519 Ashlawn Drive, Murfreesboro, TN 37129 MURF 1989
SHERWOOD, Mrs. Vida, Route 4, Box 248, Tullahoma, TN 37388 HR 1986
SHOCKLEY, M/M Donald R., 904 Wilson Avenue, Tullahoma, TN 37388 HR 1984
SHURLEY, Donna D., Rt. 11, Box 1195, Merilyn Drive, Ringgoldale, GA 30736 CHAT 1987
SIMBECK, Mr. Damien J., University of Tennessee Dept. of
Zoology, M-313 Walters Life Sciences, Knoxville, TN 37996 KNOX 1985
SIMBECK, M/M Don K., Rt. #2, Box 3-A, Loretto, TN 38469 BR 1972
SIMMERS, Mr. Richard W., Route 6, Box 170, Cookeville, TN 38501 NASH 1978
SIMMS, Mrs. Beth, 2404 Sherrod Rd., Knoxville, TN 37920 KNOX 1978
SIMPSON, Jr., Dr. Marcus, 11905 Yellow Rush Pass, Columbia, MD 21044 CORR 1961
SKIPPER, Mrs. Carlos, 100 James Blvd., E-309, Signal Mountain, TN 37377 CHAT 1975
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6312 Kingsbury Drive, Brentwood, TN 37027 NASH 1987
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SMITH, Miss Alice H., Route 1, Box 323 Covington, TN 38019 MEM 1933
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SMITH, Mr. Arthur S., 100 Otari Drive, Route 14, Kingsport, TN 37664 TAL 1960
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Cornell University, Ithaca, NY 14850 CORR 1963
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Apt A, Huntsville, AL 35802 MEM 1941
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WISER, M/M Richard, 585 Miller Lane, Lawrenceburg, TN 38464 BR 1990
WITT, Dr. Terry J., Woman's Clinic\Highland Terrace
Prof. Park, 507 Highland Terrace, Murfreesboro, TN 37130 MURF 1982
WOLFF, M/M Charles R., 1409 Towson Drive, Columbia, TN 38401 COL 1985
WOOD, M/M D. L., Route 2, Box 334, Estill Springs, TN 37330 HR 1989
WOOD, Miss Mary, P. O. Box 8, Woodbury, TN 37190 NASH 1963
WOODRING, M/M George B., Route 1, Brentwood, TN 37027 NASH 1927
WORKMAN, Miss Virginia A., 2215 Abbott Martin Rd.,
Apt. B-7, Nashville, TN 37215 NASH 1960
WRIGHT, Mrs. Blair, 3676 Walnut Grove Rd., Memphis, TN 38111 MEM 1984
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WUEST, Ms. Elizabeth A., 201 Villanova Road, Oak Ridge, TN 37830 KNOX 1987
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YEATMAN, Dr. & Mrs. Harry C., P. O. Box 356, Sewanee, TN 37375 HR 1934
YELTON, Nancy, 38 Broadmoor, Jackson, TN 38305 JAC 1990
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YOUNG, Howard & Anne, 1909 East Sevier Ave., Kingsport, TN 37664 TAL 1973
ZAENGLEIN, Mr. Ralph J., P. O. Box 1788, Maryville, TN 37802 TAL 1955
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ZIPPERER, M/M Andrew, 277 Clearlake Drive W., Nashville, TN 37217 NASH 1988
ZIPPERER, Mr. Stephen, 630 Bell Road, Apt. 157, Antioch, TN 37013 NASH 1989

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ACTUAL MAILING DATE: 6 FEB. 1991

QL
684
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Birds

ISSN 0026-3575

MIGRANT

A QUARTERLY JOURNAL
DEVOTED TO TENNESSEE BIRDS

Published by
THE TENNESSEE
ORNITHOLOGICAL
SOCIETY

SMITHSONIAN
JUL 19 1991
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JUNE 1990
VOL. 61, NO. 2

THE MIGRANT

A QUARTERLY JOURNAL OF ORNITHOLOGY

FIRST ISSUE PUBLISHED IN JUNE 1930

PUBLISHED BY

THE TENNESSEE ORNITHOLOGICAL SOCIETY

Founded at Nashville, Tennessee on 7 October 1915
The T.O.S. is a non-profit, educational, scientific,
and conservation organization.

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Published quarterly (March, June, September, and December).
Printed by Tennessee Industrial Printing Services, Inc., 51 Miller Ave., Jackson, TN 38305.

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THE MIGRANT

Published by the Tennessee Ornithological Society,
to Record and Encourage the Study of Birds in Tennessee.
Issued in March, June, September, and December.

VOL. 61 June 1990 NO. 2

The Migrant, 61(2):41-43, 1990.

FIRST TENNESSEE RECORD OF THE ASH-THROATED FLYCATCHER

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On 22 December 1985, I was birding in a party of five on the Kingsport Audubon Christmas Bird Count in Sullivan County. At approximately 1015 hours we parked our cars in the pulloff at the west end of Riverfront Park just off Netherland Inn Road where the North Fork and the South Fork of the Holston Rivers merge. We scattered and had birded the immediate area around the parking lot and along the river banks about 15 minutes when Rick A. Phillips called us back to the parking lot to observe a "Great Crested Flycatcher" (*Myiarchus crinitus*) he had located on the hillside above our vehicles. All five of us, Rick, Tom F. Laughlin, M. Tim Jones, Marie Jones and me (FJA), located the bird in the open and studied it from a distance of 6 m with binoculars ranging from 7 to 9x for approximately 20 minutes. Viewing conditions were excellent. The sky was overcast with a thin layer of clouds and the midmorning light was bright, but without strong shadows. The temperature was around -2.2 C (the maximum temperature for the day was 1.6 C).

The flycatcher was perched on the upper branching stems of a pokeweed plant (*Phytolacca americana*) that was part of a cluster of 20 or more of these plants ranging in height from 1 to 3 m and growing in the open at the edge of a stand of hardwood trees on the hillside. The flycatcher would leave its perch on the pokeweed to feed on the fruiting clusters of purple-black berries. While eating, the bird stood on the berry-bearing stalks and picked the fruits one at a time. It would eat several of the berries and then return to a perch on the pokeweed. In the time we observed it, it never left the pokeweed, always alternating its activities between perching on the low plants and feeding on the poke berries. We never observed it more than 3 m above the ground and we never saw it take any insects. The bird appeared stressed. It held its wings in a somewhat drooped position against its sides and its flights in the clump of pokeweeds seemed sluggish. We felt it was not healthy and that we could probably return later in the day and find its body (individually, Rick and I returned several times that day, and on several subsequent days, looking for the flycatcher, but we never saw it again).

As we began to observe the bird initially, I cautioned everyone to consider that any flycatcher other than an Eastern Phoebe (*Sayornis phoebe*) found in Tennessee

in mid-winter was a most unusual sighting and that we should carefully note and agree upon all the fieldmarks of this *Myiarchus* species because it could be a western species instead of a Great Crested Flycatcher. The following field characteristics were scored by all five observers: The tail and wings were reddish-brown. The tail was darker near its base on the upper side and the individual tail feathers were darker brown on their outer margins. The wings showed two conspicuous whitish bars. The bill was dark. The throat, chin and upper breast were pale gray being lighter, almost white, on the chin and throat. The gray of the breast blended gradually into the pale yellow of the lower breast and belly. The underparts to the end of the undertail coverts were pale yellow. The head was grayish-brown and slightly crested. The bird appeared to us like a very pale, washed-out Great Crested Flycatcher, but none of us had ever seen one in winter and didn't know if there was an alternate plumage not described by the eastern field guides we carried (Peterson 1980). The bird made no vocalizations in our presence.

I was the only one in the party with prior field experience with the Ash-throated Flycatcher (*M. cinerascens*) and it was not until I was able to work in my home library late that night that I was convinced that the flycatcher we had studied was, indeed, an Ash-throated Flycatcher. Everything we had noted as we studied the flycatcher on the spot, and that I had recorded in my field notes, agreed only with the characteristics of an Ash-throated Flycatcher, not a Great Crested Flycatcher. Several days later I talked by telephone with Tom Imhof, regional editor for *American Birds*, for the Alabama, Mississippi and Tennessee region. We discussed all the aspects of our field observation and he concurred with my contention that the species was, indeed, an Ash-throated Flycatcher (the bird was accepted by him as this species and was published as such in the Kingsport Christmas Count, 801, pages 1043-1044, *American Birds*, 50 (4)). This sighting constitutes the first known record for the Ash-throated Flycatcher for Tennessee.

This record for the Ash-throated Flycatcher in Tennessee, is, perhaps, not as unexpected as it may first appear. William L. Murphy, writing in *American Birds* (1982), states, "The Ash-throated Flycatcher (*Myiarchus cinerascens*), once considered to be an accidental visitor east of the Mississippi River, has become a regular fall and occasional spring visitor in recent years." Murphy (1982) presents an annotated list of sightings, seasonal and geographic patterns of sighting, and characteristics by which field observers can distinguish the species of *Myiarchus* flycatchers found in America north of Mexico from the Ash-throated Flycatcher. Information he lists (Murphy 1982), including visual characteristics and behavior, add to my own personal convictions as to the correct identity of the bird I observed in Kingsport.

Murphy (1982), in noting the seasonal distribution of this flycatcher east of the Mississippi River in the period from 1911 to the mid-1980's, states, "Most records are from September to December, with late November and early December accounting for peak numbers of observations." Commenting on the bird's behavior he (Murphy 1982) remarks, "The height at which most Ash-throated Flycatchers have been observed in the East is a matter that many observers have regarded as having sufficient significance to merit mention in their reports. With few exception, (*sic*) all eastern sightings have been of birds that remained within a few feet of the ground." Murphy (1982) examined many specimens of *Myiarchus* flycatchers in the collection of the U.S. National Museum and notes, "Every specimen of *M. cinerascens* has pale

yellow on the belly and has mandibles that are dark brown, almost black, to the base. Furthermore, *M. cinerascens* was the only species with a very pale gray or even whitish throat and breast. All other species had graying throats and breasts, the color of which contrasted strongly and abruptly with the lemon underparts."

The nearest known sighting of an Ash-throated Flycatcher to the Kingsport sighting was in Raleigh, Wake County, North Carolina (Murphy 1982), approximately 180 km east-southeast, 15 May 1973.

LITERATURE CITED

Murphy, W.L., 1982. The Ash-throated Flycatcher in the East: an overview. American Birds, 36(3):241-247.

Peterson, R.T., 1980. A field guide to the birds east of the Rockies. Houghton Mifflin Co., Boston.

Accepted 1 March 1990.

The Migrant, 61(2):43, 1990.

BOOK REVIEW

ANOTHER FIELD GUIDE TO LITTLE-KNOWN & SELDOM-SEEN BIRDS OF NORTH AMERICA. Ben, Cathryn, and John Sill. 1990. Peachtree Publishers, Ltd. Atlanta, GA. 80 p. $8.95. Paper.

Well, they have done it again. The three Sillies have combined for another look at those birds everyone really sees but which never seem to be officially recognized by the A.O.U. From the Mangrove Penguin to the Rear-tailed Evader, this small illustrated volume contains descriptions and accounts of 32 "species." Each account includes a particular humorous anecdote or wry combination of impossibilities; for example, the aromagram for the Greater Noxious Grossbird, which perhaps would be more appropriately be expressed on a logarithmic scale; and the description of the Broad-billed Babbler that itself exemplifies the species. Added to this work are finer details of the phylogeny of certain species, such as the prediction that somewhere out there will be or was a caprimulgid that had the call "Will." This little, well-illustrated volume is a lot of fun, like its predecessor. I found it somewhat less plausible than the first, but am convinced that readers of *The Migrant* will enjoy it. My only reservation in recommending it heartily is that they have again ignored a prominent southern species, the Red-naped Owl, whose pellets I have repeatedly found. Maybe next time; maybe not! — PAUL B. HAMEL

The Migrant, 61(2):44, 1990.

RUFF IN NORTHEAST TENNESSEE

Richard L. Knight
804 North Hills Drive, Johnson City, TN 37604

On 10 May 1989 I observed a breeding plumaged female Ruff (*Philomachus pugnax*) at Austin Springs, Washington County, Tennessee. The bird associated with a small flock of Greater (*Tringa melanoleuca*) and Lesser Yellowlegs (*T. flavipes*) in a pasture field of short to medium-high grass with numerous rain puddles. This field is adjacent to the upper portion of the Watauga River prong of Boone Lake. Initial observations were through 7x binoculars and a 20x spotting scope at distances of 15-40 m for about 30 minutes. The sky was overcast and local visibility was good.

Compared to the yellowlegs, the Ruff was about the same size as the Lesser, though not quite as tall and perhaps a little plumper. The back, wings and head were a medium-dark brown. The breast was a lighter brown with several thin black bars, gradually blending into a white belly. A short dark line extended through the eye. The bill was black, shorter than the Lesser Yellowlegs' bill and thicker at the base, tapering to a slightly drooped tip. When viewed head-on, a buffy-white ring around the base of the bill was discernible. The legs were dingy yellow and appeared slightly shorter than those of the Lesser Yellowlegs. In flight, the sides of the rump were white, appearing to join distally as a U- or V- shaped band on an otherwise brown rump and tail. A faint, narrow white wingbar was visible also. The Ruff skulked through the grass and fed with a pecking action. No calls were heard. The combination of observed field marks, especially the breast and rump patterns and the bill, eliminated possible confusion with Upland Sandpiper (*Bartramia longicauda*), Pectoral Sandpiper (*Calidris melanotos*) and Stilt Sandpiper (*C. himantopus*). References consulted shortly after the initial observation were Scott (1983) and Hayman et al. (1986). Present for four days, the Ruff was last seen on 13 May. Over 20 people viewed the bird.

There are two published sight records of Ruff in Tennessee: 6-9 April 1972, one in Sequatchie County (Shafer 1972) and 21 August 1988, one in Shelby County (Waldron 1989).

Literature Cited

Hayman, P., J. Marchant and T. Prater. 1986. Shorebirds, an identification guide to the waders of the world. Houghton Miflin, Boston.

Scott, S.L. (ed.). 1983. Field guide to the birds of North America. National Geographic Society, Washington, D.C.

Shafer, W.L. 1972. First known record of a Ruff in Tennessee. Migrant 43:86.

Waldron, M. 1989. Second record of Ruff in Tennessee. Migrant 60:51.

Accepted 18 July 1989.

The Migrant, 61(2):45-48.

MINUTES OF THE 1990 TOS BOARD OF DIRECTORS MEETING

The Board of Directors Meeting was held at the Ramada Inn on Mt. Moriah Road in Memphis on May 5, 1990, with 23 directors in person and two who were represented by proxies. President Barbara Finney called the meeting to order at 2:45 p.m. and copies of the minutes of the 1989 fall meeting were distributed. Fred T. Carney moved the minutes be approved as written. Helen Dinkelspiel seconded it and the motion carried.

VICE-PRESIDENTS AND DIRECTORS AT LARGE: There were no reports.

TREASURER George Payne reported that from 13 October 1989 to 1 May 1990, income was $16,635.43 and expenses were $9,153.96. Current assets are $62,041.74. The report is filed with the secretary.

George Payne listed the paid membership as 775 members with several chapters still to report. A new chapter in Jackson has 26 memberships.

CURATOR James Tanner reported the sale of back issues of THE MIGRANT brought $20. No additions were made to the archives.

EDITOR, THE MIGRANT: David Pitts reported that Bob Ford has replaced John Robinson as Season Editor, and Susan McWhirter has replaced Damien Simbeck as State Count Compiler. A compiler is still needed for the hawk counts.

The September 1989 issue of THE MIGRANT is ready and will be mailed May 16. It is a small issue of 24 pages, including the TOS Constitution and Bylaws. Four different colors will again be used for the covers of THE MIGRANT for the different seasons. The printer has been changed to the Tennessee Industrial Printing Services in Jackson, which charges five cents a page compared to the seventeen cents charged by Allen Press, the former printer.

David Pitts asked for pictures for the special 75th Anniversary issue. He needs photos of chapters, chapter officers, field trips, and special occasions. He would like suggestions concerning the contents and the special cover for that issue.

David Pitts reported that he had received two requests for THE MIGRANT to carry advertising. Don Davidson moved that there be no advertising in THE MIGRANT. Ken Dubke seconded and the motion passed.

Barbara Finney showed the two designs which had been submitted in the contest for a new cover for THE MIGRANT. Chuck Nicholson moved that we accept these as entrants but that the contest for a new cover remain open until the next annual meeting, at which time the membership would vote. Fred T. Carney seconded and the motion carried.

NOMINATING COMMITTEE: Jim Ferguson reported that the committee would place the name of Bob Ford in nomination for president-elect.

FINANCE COMMITTEE: Jim Tanner said the committee approved the Treasurer's Report.

BREEDING BIRD ATLAS: Chuck Nicholson reported that field work will take six seasons. This is the fifth season, and if the weather is good, almost all the priority blocks in East Tennessee will be completed. Middle Tennessee will be about 80% finished and West Tennessee about 60% done. The project raised over $3,500 since the fall meeting of TOS. A large portion of this money will be spent on hiring

Atlasers to work blocks this summer. He also reported that the contract for publication has been signed with the UT Press.

CONSERVATION AND EDUCATION: Ken Dubke reported that the 1986 resolution sent by the Columbia chapter to the Monsanto Company has saved three or four of the ponds. According to Bob Hatcher, two Peregrine Falcons have been seen in the Great Smoky Mountains National Park, and it is hoped that they will raise young. One Red-cockaded Woodpecker is reported in Polk County. Heronries are doing well, but Barn Owls are scarce.

PATCHES AND DECALS: Lil Dubke reported that Susan Watson has left Tennessee and returned the patches and decals to her. There were not many left. Barbara Finney showed a new design for the TOS decals and patches that Bill Bridgeforth had suggested. George Mayfield moved that we investigate getting new decals in whatever number between 100 and 1000 would be economical, and that we discuss it at the Fall Meeting. Fred T. Carney seconded it and the motion carried. George Mayfield moved and Brad Hammond seconded that we also investigate patches. The motion carried, and Barbara Finney appointed Bill Bridgeforth, Fred T. Carney, and George Mayfield as the committee.

FALL SYMPOSIUM: George Mayfield and David Pitts are the Fall Symposium chairmen. The meeting will be on October 26-28, 1990 at the Holiday Inn at Dickson. David Pitts called for papers for the Symposium. George Mayfield will try to make reservations now for Fall Creek Falls State Park for the 1992 fall meeting, as it is necessary to book reservations over a year in advance at state parks.

TENNESSEE ENVIRONMENTAL COUNCIL: Ken Dubke reported that Barbara Harris has been representing TOS at the meetings.

TOS AWARDS COMMITTEE: Ron Hoff sent letters to all the chapters and to the directors at large, asking for nominations of members to receive the TOS Distinguished Service Awards. The Awards Committee consisted of Ron Huff, Richard Newton, and Barbara Finney, and the recipients were chosen both on the basis of past contributions and on geographic location. The number of awards this year is ten, a large number because it is the 75th Anniversary and because it is the start of the awards. Fewer will be given in future years. Ron Hoff stated that the utmost care is taken to insure fairness in the selection process, and that eventually all deserving members will receive an award.

Ron Hoff showed a copy of the handsome certificate to be awarded, suitable for framing. He also showed a sample lapel pin designed by Michael Darr of T. Darr's Jewelry in Knoxville. The lapel pin was in the shape of a mockingbird and would cost $12-15 in silver and $40 in gold. Ken Dubke moved that Ron Hoff be reimbursed for his financial outlay, and that we adopt a pin in silver with a mockingbird on the letters TOS, and that it be used exclusively for the TOS Awards. George Mayfield seconded and the motion passed.

FORAYS: Chuck Nicholson announced a foray on Memorial Day weekend at Martin, and one at Pulaski on June 22.

BIRD-A-THON: Rick Knight announced a Bird-a-thon as a fundraiser for the Breeding Bird Atlas. He and Jim Brooks and Brian Cross will make an exhaustive count of the species of birds in Carter and Washington counties on May 9. They hope to get 130-140 species and ask the members to make a pledge per species.

Richard Newton, president of the Nashville chapter, issued an invitation to the TOS to hold the 1991 Annual Spring Meeting in Nashville the first week-end in May. It was accepted.

There being no further business, the meeting adjourned at 3:30 p.m.

Respectfully submitted,

Nancy Tanner, Secretary TOS

TOS ANNUAL MEETING
75TH ANNIVERSARY

The seventy-fifth annual meeting of the TOS was held at the Ramada Inn on Mt. Moriah Road in Memphis on May 5, 1990. Van Harris, president of the Memphis Chapter, welcomed everyone, thanked his committees, and introduced the head table. He also read a letter of welcome from the mayor of Memphis.

Barbara Finney, president of the TOS, convened the business meeting at 8:00 pm. and thanked the Memphis Chapter for a very successful meeting. Nancy Tanner, secretary of TOS, read the minutes of the 1989 Spring Annual Meeting, which were approved as read. The secretary then gave a summary of the Board of Directors Meeting.

President Barbara Finney announced that the two designs which had been submitted in the contest for a new cover for THE MIGRANT were on display. She called on the chapters to advertise the contest locally.

Treasurer George Payne repeated his report as given at the Board of Directors Meeting, and a copy was filed with the secretary.

Jim Ferguson, chairman of the Nominating Committee, placed the name of Bob Ford in nomination for president-elect. Ron Hoff moved that the nominee be elected by acclamation. Ken Dubke seconded and the motion carried.

Chuck Nicholson, chairman for the Breeding Bird Atlas, repeated the report he had given to the Board of Directors and announced there would be a foray in Martin on Memorial Day weekend, and one at Pulaski on June 22.

George Mayfield, co-chairman with David Pitts of the Fall Symposium, announced that the meeting will be at Dickson on October 26-28, 1990. He said to contact David Pitts with papers for the Symposium.

Ron Hoff, chairman of the TOS Awards Committee, presented the recipients of the TOS Distinguished Service Awards with handsome certificates. He gave an account of each recipient's contributions and service to TOS for which the honor was awarded. The recipients were as follows:

From Memphis: Dr. Arlo Smith, Noreen Smith, and Mary Davant

From Nashville: Katherine Goodpasture and Sue Bell

From Chattanooga: Kenneth Dubke and Lillian Dubke

From the Lee R. Herndon Chapter: Lois Herndon

From Knoxville: J. B. Owen and Dr. James T. Tanner

Richard Knight announced a Bird-a-thon to raise money for the Breeding Bird Atlas on May 9 in Carter and Washington counties. He asked members to sign pledges of money for the number of species.

President Barbara Finney conducted a chapter roll call. There were 113 members present from ten chapters and the Members at Large group. The business session was then adjourned.

Jim Ferguson, chairman of the 75th Anniversary meeting, introduced three charter members of the Memphis Chapter which began sixty years ago. They were Mary Davant, John Embury, and Ben Coffey.

Jim Ferguson then introduced the speaker for the evening, Dr. James T. Tanner, Curator of the TOS, who spoke on "The T.O.S. at 75, Looking Back — Looking Forward."

After the talk, Jim Ferguson thanked the speaker and presented him with a 75th Anniversary plate designed and made by the potter, Agnes Stark.

President Barbara Finney closed the meeting at 9:20 p.m. by thanking Jim Ferguson and all the members who had cooperated and worked so well.

Respectfully submitted,

Nancy Tanner, Secretary

The Migrant, 61(2):48-53, 1990.

1990 SPRING FIELD DAYS

Susan N. McWhirter

The 1990 Spring Field Days is the 45th annual count as published in this format. Nine counts were held across the state for a total of 205 species, up from the 1989 total of 199 species, but still below a ten-year average of 214 species per yearly count. Most counts reported cloudy skies with many also experiencing wind and rain. Among the notable species were Sandhill Crane, Laughing Gull, Merlin, Sharp-tailed Sparrow, and American Tree Sparrow.

INFORMATION ON THE COUNTS

MEMPHIS — 29 April; 0700-1800; cloudy to clear; wind light and variable; temp. 60-80F; Shelby Forest S.P. in A.M., Penal Farm, Ensley Bottoms, and Robco L. in P.M. 36 observers, Martha Waldron (compiler — 1626 Yorkshire Dr., Memphis 38119).

COLUMBIA — 27-28 April; Friday-clear and cool, overnight thunderstorms; Saturday — intermittent rain; temp. 60-80F, wind S to SW, 5-15 MPH during storms; 11 observers in 6 parties. William Fuqua, William Jernigan, Allyn Lay, Bedford & Anne Lochridge, George (compiler — 999 Sunnyside Dr., Columbia 38401) & Cleo Mayfield, Wendell Robinson, Karen Stephens, Charges Wolfe.

MURFREESBORO — 28-29 April; overcast, intermittent sun, windy; temp. 46-58F; 36 hours, 435 miles. Bertha & Jim Chrietzberg, Bill & Lou A. Erwin, Edith Haynes, Anne (compiler — 1018 Lawndale, Murfreesboro 37291) & Bob Hettish, R.E. & W.J. Hunter, Ruth & M.R. McMillan, Eugene & Ruth Odom.

LEBANON — 5-6 May; 0630-2000; cloudy with showers to clear; temp. 54-69F; 3 miles by foot, 149 by car; 2 hrs. at feeders; 13 observers, Earline C. & Vernon C. Berry, Jean Callis, Frank & Norma Crawford, June Gelpi, Melville R. & Ruth V. McMillan (Compiler — R.R. 2, Box 141, Lacassas 37085), N. Kay Norris, Ramona See, Margie & Martin Smith, Melissa A. & Roy Turrentine.

HIGHLAND RIM — 27 May, 1800-2200; 28 May, 0530-1800; mostly cloudy and windy, but periods of showers, sun, calm; temp. 55-70F; 21 hrs. by car, 9 hrs. on foot, 11 hrs. at feeders, 4 hrs. owling; 250 miles by car, 10 miles on foot, 40 miles owling; 24 observers in 13 parties plus 6 at feeders; Don Davidson (compiler — 1703 2nd Ave., Manchester 37355), Marjory Harper, Frank & Marguerite Hernandez, Dot and Fred Latremore, Ruth Luckado, Agnes & H.D. Marcrom, Corinne & Joe Martinez, Nicky & Phil Medley, Annie Norvell, Chloe & Howell Peebles, Erma Rogers, Betty Stribling, Jean Sullivan, Bobbie Wood, Harry & Jean Yeatman, Grady & Willa York.

CHATTANOOGA — 12 May; 0700-1900; cloudy with some rain; wind S 18-29 mph; temp. 55-80F; 18 observers, Joan & Paul Bradshaw, Don Davidson, Ken (compiler — 8139 Roy Ln., Ooltewah 37363) & Lil Dubke, Paul Harris, John Henderson, Ella & J.N. Howard, Bill & Polly Lane, Ruth Luckado, Barbara & Mike McMahan, Tommie Rogers, Madeline Seefeld, Gladys Smith, Quincy Stykes. The adult Laughing Gull was identified by the John Henderson party on Nickajack Lake, Marion Co.; the Philadelphia Vireo was identified by Lil Dubke and others.

KNOXVILLE — 29 April; overcast skies in A.M. changing to partly cloudy by P.M.; temp. 50-80F; 23 observers in 14 parties for 95.1 party hours; 333.5 miles by car, 38 on foot, 3 by boat; Ron Hoff (compiler — 4523 McCloud Rd., Knoxville 37938).

GREENEVILLE — 21 April; 0530-2100; cloudy with slight rain; wind SW up to 20 mph; temp. 64-59F; 30.25 hrs. by car, 23.5 hrs. on foot, 4 by boat, 1 hr. owling, 28.25 hrs. at feeders; 345 miles 1 mi. by car, 18.75 by foot, 3.5 by boat, 1 mi. owling; 18 observers in 12 parties plus 3 at feeders, Mark, Orland, & Phine Britton, Cynthia & Herb Cragin, Juanita & Lenard Heckart, Jim Holt (compiler — 311 Colonial Cl., Greeneville 37743), Cindi Jones, Richard & Willie Ruth Nevius, Daniel J. Nieves, Linda J. & Roy Northrop, Doug Ratledge, JoAnne & Larry Routledge, Helen & Royal Spees, George & Jean Weaver.

ELIZABETHTON — 12 May; 0430-2130; mostly cloudy; windy; temp. 46-75F; 70 party hours; 15 observers in 5 parties; Jim Brooks, Brian Cross, Rusty Dunn, Harold Everhart, Sally Goodin, Dan Huffine, Rick Knight (compiler — 804 N. Hills Dr., Johnson City 37604), Richard Lewis, Dick Lura, Perry McDorman, Tom McNeil, Stan Strickland, Glenn Swofford, Gary Wallace, Frank Ward. Excellent details submitted for female Merlin seen by Dick Lura, and Sharp-tailed Sparrow seen by Rick Knight, Jim Brooks, & Harold Everhart (10th local record, 1st in spring).

TABLE 1. 1990 Spring Counts

	Memp	Colu	Murf	Leba	High	Chat	Knox	Gree	Eliz
Common Loon	*	*	*	*	1	1	*	*	*
Pied-billed Grebe	1	1	*	*	1	*	*	*	*
Double-crested Cormorant	325	12	*	*	1	2	1	*	2
Great Blue Heron	13	8	1	8	23	15	14	3	*
Great Egret	*	*	*	*	*	*	1	*	*
Snowy Egret	3	*	*	*	*	*	*	*	*
Little Blue Heron	*	*	1	*	*	*	*	*	*
Cattle Egret	12	*	*	*	*	*	*	*	*
Green-backed Heron	4	12	4	*	2	5	9	11	9
Black-cr. Night Heron	*	5	2	*	*	*	1	*	*
Yellow-cr. Night Heron	2	*	*	*	*	1	*	2	*
Canada Goose	14	97	29	38	43	30	58	46	41
Wood Duck	15	20	4	8	4	6	53	55	53
American Black Duck	*	*	*	*	*	*	*	11	*
Mallard	33	12	5	6	14	6	7	17	47
Blue-winged Teal	51	21	*	*	1	*	2	1	7
Northern Shoveler	*	2	*	*	*	*	*	*	*
Gadwall	2	1	*	*	*	1	*	*	*
American Wigeon	*	*	*	*	*	2	*	*	*
Ring-necked Duck	*	5	*	*	*	*	*	4	*
Bufflehead	*	*	*	*	*	*	*	*	1
Hooded Merganser	*	*	*	*	*	1	*	*	*
Red-breasted Merganser	*	4	*	*	*	*	*	*	1
Black Vulture	*	25	17	13	3	6	8	29	2
Turkey Vulture	*	65	2	31	13	6	22	74	34
Osprey	*	2	*	*	*	*	6	1	*
Mississippi Kite	25	*	*	*	*	*	*	*	*
Bald Eagle	*	*	*	*	*	1	*	*	*
Northern Harrier	*	1	*	*	*	*	*	4	*
Sharp-Shinned Hawk	2	3	*	*	*	1	1	4	1
Cooper's Hawk	*	3	2	2	*	*	*	1	1
Red-shouldered Hawk	2	1	*	1	*	3	*	*	*
Broad-winged Hawk	4	2	*	2	2	3	7	12	5
Red-tailed Hawk	9	16	4	8	7	2	10	14	4
American Kestrel	5	13	14	11	4	1	4	12	12
Merlin	*	*	*	*	*	*	*	*	1
Ruffed Grouse	*	*	*	*	*	*	*	*	3
Wild Turkey	2	*	*	1	1	*	*	*	2
Northern Bobwhite	3	39	2	14	11	6	29	44	12
Sora	*	9	*	*	*	*	*	*	*
Sandhill Crane	*	*	*	*	*	*	*	1	*
American Coot	*	4	*	2	1	4	*	*	*
Semipalmated Plover	5	*	*	*	*	1	*	*	*
Killdeer	*	50	13	20	30	10	45	41	23
Greater Yellowlegs	152	*	*	*	24	1	*	1	*
Lesser Yellowlegs	39	2	*	*	10	*	*	3	1
Solitary Sandpiper	17	23	2	*	21	3	8	3	21
Willet	*	*	*	*	8	*	*	*	*
Spotted Sandpiper	1	15	3	3	2	3	7	9	34
Semipalmated Sandpiper	2	7	*	*	*	1	*	*	*
Western Sandpiper	*	3	*	*	*	2	*	*	*
Least Sandpiper	15	5	*	*	8	3	*	*	7
Pectoral Sandpiper	50	*	*	*	10	*	*	*	1

TABLE 1. 1990 Spring Counts

	Memp	Colu	Murf	Leba	High	Chat	Knox	Gree	Eliz
Stilt Sandpiper	10	*	*	*	*	*	*	*	*
Dowitcher sp.	16	*	*	*	*	*	*	*	*
Short-billed Dowitcher	*	1	*	*	*	*	*	*	*
Common Snipe	63	7	*	*	*	*	4	1	*
American Woodcock	*	4	*	*	*	*	1	1	*
Laughing Gull	*	*	*	*	*	1	*	*	*
Bonaparte's Gull	*	4	*	*	*	*	3	*	*
Ring-billed Gull	11	1	*	*	2	30	16	3	3
Caspian Tern	*	2	*	*	*	7	*	*	*
Forster's Tern	*	*	*	*	3	*	*	*	*
Rock Dove	1	49	75	18	13	15	104	42	38
Mourning Dove	42	69	109	113	88	6	294	233	135
Black-billed Cuckoo	*	*	*	*	*	1	*	*	*
Yellow-billed Cuckoo	1	5	4	7	1	1	4	1	1
Barn-owl	*	*	2	*	*	*	*	2	2
Eastern Screech-owl	1	9	*	1	1	*	3	*	5
Great-horned Owl	2	7	1	*	1	*	3	*	3
Barred Owl	3	7	*	*	1	1	*	*	1
Common Nighthawk	*	6	2	4	3	2	*	*	14
Chuck-will's-widow	*	4	2	5	3	1	9	*	4
Whip-poor-will	*	5	2	2	2	*	1	1	4
Chimney Swift	28	85	32	70	32	35	169	82	184
Ruby-thr. Hummingbird	17	13	5	7	7	1	8	1	11
Belted Kingfisher	5	9	2	*	3	*	10	15	7
Red-headed Woodpecker	37	7	3	3	5	*	*	1	1
Red-bellied Woodpecker	82	58	11	11	17	8	81	44	21
Yel-bellied Sapsucker	*	*	*	*	1	*	*	1	*
Downy Woodpecker	6	43	7	11	10	4	40	34	7
Hairy Woodpecker	3	3	*	2	2	1	1	*	5
Northern Flicker	6	10	9	6	9	3	37	40	28
Pileated Woodpecker	11	11	1	2	3	5	20	27	23
Eastern Wood Peewee	42	15	*	4	3	4	5	3	19
Empidonax sp.	1	*	*	*	*	*	*	1	*
Acadian Flycatcher	64	10	*	1	1	2	1	*	15
Willow Flycatcher	*	2	*	*	*	*	*	*	4
Least Flycatcher	*	1	*	*	*	*	*	*	6
Eastern Phoebe	6	17	2	16	4	2	26	22	19
Great Crested Flycatcher	33	12	1	16	7	1	8	1	19
Eastern Kingbird	26	63	37	23	25	3	21	5	28
Horned Lark	14	1	*	*	*	*	*	*	*
Purple Martin	147	61	62	183	23	18	68	8	52
Tree Swallow	27	77	12	*	5	2	15	6	6
N. Rough-wng. Swallow	13	113	*	*	23	6	46	21	114
Bank Swallow	1	*	5	*	*	1	36	*	*
Cliff Swallow	*	*	*	*	8	10	*	*	28
Barn Swallow	123	86	66	75	34	20	164	92	124
Blue Jay	34	70	42	100	51	18	314	179	79
American Crow	18	57	81	127	68	16	275	172	140
Fish Crow	5	*	*	*	*	*	*	*	*
Common Raven	*	*	*	*	*	*	*	*	4
Carolina Chickadee	46	65	14	62	24	20	162	78	46
Tufted Titmouse	112	72	15	47	26	21	109	69	36

TABLE 1. 1990 Spring Counts, Continued

	Memp	Colu	Murf	Leba	High	Chat	Knox	Gree	Eliz
Red-breasted Nuthatch	*	*	1	*	*	*	*	1	1
White-breasted Nuthatch	6	1	*	1	18	4	8	9	6
Brown-headed Nuthatch	*	*	*	*	*	4	*	*	*
Brown Creeper	*	*	*	1	*	*	*	*	*
Carolina Wren	119	119	12	45	8	26	193	40	84
Bewick's Wren	*	1	*	*	*	*	*	*	*
House Wren	*	3	6	2	1	*	5	8	12
Marsh Wren	*	*	*	*	*	*	*	*	2
Golden-crowned Kinglet	*	*	*	*	*	*	*	*	12
Ruby-crowned Kinglet	*	2	*	*	4	*	30	3	4
Blue-gray Gnatcatcher	139	106	*	11	17	10	66	10	35
Eastern Bluebird	35	110	52	143	46	25	68	91	57
Veery	4	2	*	*	*	1	3	*	3
Gray-cheeked Thrush	3	*	*	*	*	*	1	*	*
Swainson's Thrush	51	1	*	*	*	1	41	*	5
Hermit Thrush	*	1	*	*	*	*	2	*	*
Wood Thrush	60	12	*	6	3	5	62	*	15
American Robin	83	203	228	154	123	18	433	315	431
Gray Catbird	10	22	12	7	4	1	24	1	18
Northern Mockingbird	32	59	36	96	61	15	145	82	59
Brown Thrasher	11	42	21	27	18	6	37	36	25
Water Pipit	*	*	*	*	*	*	18	*	*
Cedar Waxwing	15	25	20	*	3	10	108	97	43
Loggerhead Shrike	5	14	4	13	6	2	1	5	1
European Starling	84	308	5165	320	128	50	683	474	956
White-eyed Vireo	73	83	*	16	4	3	30	6	12
Solitary Vireo	*	*	*	*	*	*	4	*	11
Yellow-throated Vireo	7	4	*	*	3	2	7	*	4
Warbling Vireo	1	32	*	*	*	*	*	*	6
Philadelphia Vireo	*	1	*	*	1	1	1	1	1
Red-eyed Vireo	53	57	2	17	8	25	162	2	81
Blue-winged Warbler	1	6	*	*	1	*	7	*	2
Golden-winged Warbler	*	*	*	*	*	14	4	*	3
Tennessee Warbler	72	12	*	*	1	*	25	1	2
Orange-crowned Warbler	*	*	*	*	*	*	1	*	*
Nashville Warbler	2	1	*	*	2	*	7	*	*
Northern Parula	104	21	*	*	2	1	7	1	8
Yellow Warbler	*	56	*	7	1	2	10	10	40
Chestnut-sided Warbler	3	4	*	*	3	1	7	*	32
Magnolia Warbler	2	1	*	*	*	1	5	*	3
Cape May Warbler	*	1	*	*	2	1	18	*	2
Black-thr. Blue Warbler	*	*	*	*	*	*	3	*	25
Yellow-rumped Warbler	10	128	4	13	12	1	259	70	29
Black-thr. Green Warbler	10	5	*	*	1	1	42	*	11
Blackburnian Warbler	2	1	*	*	*	1	18	*	*
Yellow-throated Warbler	3	21	*	*	1	2	1	*	7
Pine Warbler	*	9	3	*	1	3	19	1	4
Prairie Warbler	*	28	*	11	7	*	8	*	4
Palm Warbler	*	110	15	5	6	1	12	*	*
Bay-breasted Warbler	1	4	*	*	2	1	2	*	5
Blackpoll Warbler	*	5	*	1	1	1	12	3	2
Cerulean Warbler	14	7	*	*	2	2	8	*	2
Black & White Warbler	9	4	*	2	1	1	17	*	24

TABLE 1. 1990 Spring Counts, Continued

	Memp	Colu	Murf	Leba	High	Chat	Knox	Gree	Eliz
American Redstart	33	9	*	1	*	15	8	4	5
Prothonotary Warbler	33	24	2	4	1	3	4	*	1
Worm-eating Warbler	2	2	*	*	2	1	9	*	14
Swainson's Warbler	2	*	*	*	*	*	*	*	1
Ovenbird	3	1	*	*	3	*	19	*	55
Northern Waterthrush	*	2	*	*	*	*	1	1	3
Louisiana Waterthrush	5	9	*	*	1	1	3	*	5
Kentucky Warbler	32	14	*	*	2	3	8	*	12
Common Yellowthroat	25	84	3	28	8	4	54	7	23
Hooded Warbler	14	20	*	*	1	*	14	*	23
Canada Warbler	*	*	*	*	*	1	1	*	3
Yellow-breasted Chat	3	45	1	14	5	2	25	*	15
Summer Tanager	52	23	*	19	4	1	16	*	*
Scarlet Tanager	18	14	*	9	2	2	34	2	38
Northern Cardinal	161	235	91	158	106	12	341	160	125
Rose-breasted Grosbeak	12	1	*	*	3	1	31	*	9
Blue Grosbeak	1	5	*	10	2	2	11	1	5
Indigo Bunting	140	89	10	86	19	6	171	*	130
Painted Bunting	1	*	*	*	*	*	*	*	*
Dickcissel	47	*	1	*	*	*	*	*	*
Rufous-sided Towhee	10	142	8	51	14	6	127	29	42
American Tree Sparrow	*	*	*	*	*	*	*	1	*
Chipping Sparrow	10	32	11	23	22	10	52	59	30
Field Sparrow	7	67	19	82	8	12	87	37	18
Vesper Sparrow	*	*	*	*	*	*	*	1	*
Lark Sparrow	*	*	*	1	*	*	*	*	*
Savannah Sparrow	12	25	*	*	*	*	27	12	3
Grasshopper Sparrow	1	*	*	*	1	4	6	*	3
Sharp-tailed Sparrow	*	*	*	*	*	*	*	*	1
Fox Sparrow	*	*	1	*	*	*	*	*	*
Song Sparrow	1	2	*	*	2	12	181	47	102
Swamp Sparrow	*	13	*	*	1	*	7	*	2
White-throated Sparrow	12	81	9	*	5	1	140	155	*
White-crowned Sparrow	*	37	3	*	*	*	9	16	*
Dark-eyed Junco	*	1	*	*	*	*	*	3	15
Bobolink	150	*	*	*	*	*	20	*	16
Red-winged Blackbird	404	253	56	106	41	10	304	886	93
Eastern Meadowlark	60	181	84	156	85	6	242	183	76
Rusty Blackbird	*	*	20	*	*	*	*	*	*
Common Grackle	83	268	4144	249	216	28	678	510	550
Brown-headed Cowbird	217	140	9	81	39	6	135	94	79
Orchard Oriole	21	59	6	17	4	6	10	*	14
Northern Oriole	17	2	*	7	*	1	3	*	7
Purple Finch	*	*	*	*	1	*	*	13	*
House Finch	11	9	21	13	12	17	60	101	39
Pine Siskin	6	43	7	*	11	*	214	118	*
American Goldfinch	94	154	23	159	66	25	182	147	96
Evening Grosbeak	*	*	*	*	*	*	*	22	*
House Sparrow	20	83	22	17	44	15	140	56	60
Total Species	132	150	80	85	126	125	136	104	141

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IN MEMORIAM: DANIEL ROGER GRAY, JR., M.D.

George R. Mayfield, Jr., M.D.

No biographical sketch of Daniel Roger Gray, Jr., M.D. would be complete without mentioning the contributions to the Tennessee Ornithological Society of his father, Daniel R. Gray, who joined T.O.S. in 1916, only one year after it was founded. Dan R. Gray, Sr. had a keen interest in falconry, shared by his son, in addition to a broader interest in ornithology. This ultimately led him to join with several fellow birders from Columbia, Lewisburg, and Pulaski to found the "Blue Grass Chapter" of T.O.S. in 1937.

Therefore Dan Gray, Jr. grew up in T.O.S. When I moved to Columbia in 1960, Dr. Gray recalled our first meeting in 1937 on a field trip shared by Nashville and Blue Grass Chapter members at the farm of Dr. O.J. Porter on Bear Creek Pike near Columbia. Duck River was in flood and all participants were ferried to the Porter Farm in a flat bottom boat across the backwaters.

Dr. Gray was Secretary of the Tennessee Ornithological Society in 1969-71. He served as Middle Tennessee Vice-President 1981-83 and was again elected Vice President in May 1988 to complete the term of the late John Ellis. From September 1988 until May 1989 he served as President of T.O.S. following the resignation of the previous President. He was a charter member and first President of the reorganized Columbia T.O.S. Chapter in 1975. He was an active field ornithologist and participated in bird counts in the Columbia area from 1963 until his death. He served as President of his chapter again in 1987.

Dan Gray, Jr. was born October 19, 1916 in Maury County. He was raised on his father's farm located on the northern edge of Mt. Pleasant, Tn. His "Uncle Jeff" operated an iron-smelting furnace at nearby Rockdale, Tennessee. He attended Hay-Long High School in Mt. Pleasant and graduated as valedictorian in 1934. In 1938 he graduated from The University of the South at Sewanee, Tn., again as valedictorian. There he received The Algernon Sidney Sullivan Award and was a member of Phi Beta Kappa. He finished Harvard Medical School in 1942 and in 1943 was married to his childhood sweetheart, Gaither Frierson, who lived on the adjacent farm across Bigby Creek. He interned at Children's Hospital in Boston, then trained in surgery at Peter Bent Brigham Hospital there, and at Sloan Kettering Hospital in New York City.

After serving as a Captain in the U.S. Army Medical Corps and as a flight surgeon at Randolph Field in San Antonio, he spent another year in Pathology training at Vanderbilt University under the late Dr. Ernest Goodpasture, world renowned virologist, and husband of T.O.S. member, Katherine Anderson Goodpasture.

He practiced medicine in Columbia, Tn. for 34 years, beginning in 1946, specializing in surgery, but his office was always open to patients who developed problems not requiring surgery. In fact he was very conservative in his approach to surgery and was known for his judgment and skill at the operating table. Dr. Gray served as Chief of Staff at Maury County Hospital and on the Tennessee Board of Medical Examiners.

Dr. Gray was a communicant member of St. Peter's Episcopal Church of Columbia, a member of the choir and vestry and served as senior warden. He died on June 4, 1990, at age 73. He is buried near his place of birth, in Ashwood, Tn. at St. John's Episcopal Church, on whose board he also served. This is the church established originally for the Polk family by Leonidas Polk, who became Bishop of Louisiana and later a Lt.-General in the Army of the Confederacy.

In addition to his wife, Gaither Frierson Gray, Dr. Gray is survived by four children: Daniel R. Gray, III, an active ornithologist now in Massachusetts, Dawson Frierson Gray of Columbia, L. Rainey Gray of St. Louis, and Jefferson G. Gray of Huntsville, Alabama.

The Migrant, 61(2):55, 1990.

FIRST NESTING OF SORA IN TENNESSEE

Martha G. Waldron
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While birding at the T.E. Maxson Treatment Plant at the EARTH Complex in southwest Shelby County, Tennessee on 17 April 1990 at about 1030, I observed two small black chicks scurry from one clump of vegetation to another. I sat very still and waited, hoping to see them again. Within a few minutes an adult Sora (*Porzana carolina*) walked into the clearing, about 25 m away, with two small chicks. They walked into the vegetation and were not observed again that day.

Since no nests of Soras have been reported in Tennessee (Robinson, J. C. 1990. An Annotated Checklist of the Birds of Tennessee. Univ. Tennessee Press, Knoxville) and the closest known nests of Soras were in southern Missouri (American Ornithologists' Union. 1983. Check-list of North American birds, sixth edition. Washington, D.C., Am. Ornithol. Union.), I suspected the chicks might have been King Rails (*Rallus elegans*) as they are rare nesters in this area (Waldron, M.G. 1987. Seasonal occurrences of Shelby County, Tennessee Birds. Memphis Chapter Tennessee Ornithological Society). On 18 April 1990 at approximately 1630, I returned to the area with Dianne P. Bean, Carolyn H. Bullock, and Virginia B. Reynolds. Dianne Bean and Virginia Reynolds stationed themselves on the east side of the wet area while Carolyn Bullock and I walked on the west side of the marshy area playing a tape of the call of a King Rail. We played the tape repeatedly as we walked slowly through the marsh. There was no response to the calls. I then played a tape of Sora calls; immediately a Sora answered and Virginia Reynolds observed two black chicks moving about in the vegetation. The four of us spent 20 - 30 minutes watching the area but never saw the chicks again even though the adult walked into the open and away from the area where the chicks had been seen. An attempt to capture and photograph one of the chicks was unsuccessful.

On 6 May 1990 my husband, Jim, and I approached the wet area about 1430 with excellent viewing conditions. I observed a dark bird (the size of an adult Sora) dart across the wet area about 20 m away. We both observed a second adult Sora that walked into the marshy area and followed the first into the vegetation. We moved closer to the area in the car and sat quietly for several minutes but we did not see the Soras again that evening.

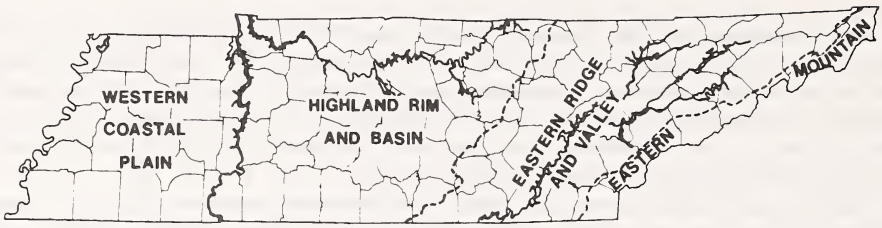
The last observations of Soras were on 8 June 1990 at 0700 when Carolyn Bullock, Virginia Reynolds and I observed one adult Sora and two dark, Sora-shaped birds move into and out of vegetation at the same site where the Soras were earlier seen.

Accepted 13 June 1990.

The Migrant, 61(2):56-64, 1990.

THE SEASON

Robert P. Ford, Editor



WINTER: 1 DECEMBER 1989-28 FEBRUARY 1990

The winter was one of contrast, both for weather and for birds. Extreme cold temperatures during mid to late December caused most lakes, and even some rivers, to freeze. The new year, however, brought milder temperatures, and the last two months of the season were almost balmy. Precipitation rates ranged widely across the state. Average precipitation, combined with cold temperature, lead to prolonged snow cover in east Tennessee.

Winter irruptive species and waterfowl apparently responded to weather conditions, appearing in variable numbers across the state. Although fewer Pine Siskins than normal were recorded in west Tennessee, eastern observers found a major invasion of siskins. The same pattern emerged for Evening Grosbeaks. Red-breasted Nuthatches occurred in relatively high densities across the state. Waterfowl numbers seemed higher this winter than that of preceding years. While heartening, remember that continental populations of ducks have been reduced to the smallest fraction of what they once numbered.

The season also had its share of rarities, these suprises are for you to find in each regional compiler's report. I will mention, however, the Peregrine Falcon found on the Memphis Christmas Count, and two sightings of Great Black-Backed Gulls (one of which is the first observation of an adult in the state). Unfortunately, most of the Rufous Hummingbirds observed recently in the state succumbed to the extreme Decmber temperatures.

As a last note, feeder watchers are consistently reporting fewer Purple Finches and more House Finches. Is there a correlation? Observers might take special note of interactions between these species.

Abbreviations used in the following report include: ad - adult; CBC - Christmas Bird Count; EOP - end of period; ers - earliest reported sighting; et al - and others; f - female; m - male; max - maximum number reported from 1 county in 1 day; m. ob. - many observers; NWR - National Wildlife Refuge; WRRS - Winter Roadside Raptor Survey;. * - record has been documented.

WESTERN COASTAL PLAIN - The winter season was unseasonably mild except for two weeks of record-breaking low temperatures in December. As unusual as the weather, a Merlin and a Peregrine Falcon were sighted on the Memphis Christmas Count. Irregular visitors such as the Pine Siskin, Purple Finch, and American Tree Sparrow occurred in lower numbers than pevious years. Three

Tundra Swans were shot in Gibson County. Short-eared Owls were again sighted in west Tennessee. In addition to the regular observers in west Tennessee, members of the new Jackson Chapter are now lending their assistance and have contributed to this report.

Loon-Falcon: Red-throated Loon: 10 Feb (1) HDC (DJS). Horned Grebe: 16 Jan (3) PLS (MAG); 26 Jan (1) Trenton GBC (MAG). Great Blue Heron: 30 Nov (6) Is 13 (WGC); 3 Dec (3) Trenton Wastewater Lagoon, GBC (MAG); 24 Jan (33) Is 13 (WGC). Great Egret: 3 Dec (3) Trenton Wastewater Lagoon, GBC (MAG). Tundra Swan: 3 swans were shot in GBC in mid-Dec, their carcasses were found under the Obion River bridge on Hwy 89 (fide MAG). Greater White-fronted Goose: 28 Dec (1) Is 13; 18 Feb (10) DYC (WGC). Snow Goose: 9 Dec-27 Dec (1-245) HDC (DJS); 2 Jan (50) Tiptonville LKC (WGC), (4) MDC (RPF); 18/26 Feb (20/50) DYC (WGC). Canada Goose: 23 Jan/28 Feb (2500+/1500+) BRF (JBC, LVC); 21 Feb (62) DYC, 26 Feb (400) LKC (WGC). Redhead: 4 Dec (40-50) PEF (MLG). GREATER SCAUP: 21-22 Dec (1-9) Savannah sewage pond, 26-27 Dec (1-8*) Pickwick Dam, HDC (DJS), m and f present. OLDSQUAW: 16 Jan (1 m, 1 f) Big Sandy Unit, Tennessee NWR, HNC (MAG). Common Merganser: 23 Jan (1) PLS (JBC, LVC). Red-breasted Merganser: 23 Jan (5) PLS (JBC, LVC); 26 Feb (1 m) LKC (WGC). Black Vulture: 3 Jan HAC WRRS (SLL, NMS, HBD, CHB); 18 Feb (28) HAC WRRS (Jackie Utley, Lynn Williams). Turkey Vulture: 9 Dec (2) PEF (MLG); 3 Jan (68) HAC WRRS (SLL, NMS, HBD, CHB); 11 Feb (22) MDC WRRS (JBC, LVC); 26 Feb (22) LKC (WGC). Sharp-shinned Hawk: 6 Dec (1) Martin, Weakly Co. (MAG); 17 Dec (4) MEM CBC (MTOS); 22 Dec (1) Savannah CBC (DJS); 8 Jan (1) Haywood Co. (JBC, LVC); 10 Jan (1) MEM (CHB, SLL, VBR, NMS); 10 Dec (1), 10 Feb (1) PEF (JEW, MGW); 17-20 Feb (1) MEM (Jere Bull). Cooper's Hawk: 17 Dec (4) MEM CBC (MTOS); 15 Jan (1) GBC WRRS (MAG); 17 Feb (1) REL (RLI, GLI); 24 Feb (1) GBC WRRS (MAG). Red-shouldered Hawk: 17 Dec (4) MEM CBC (MTOS); 22 Dec (5) Savannah Bottoms, HDC (DJS); 4 Feb (3) OBC (MTOS); 17 Feb (1) REL (RLI, GLI); 28 Feb (1) BRF (JBC, LVC). Rough-legged Hawk: 17 Dec (1), 7 Feb (1) ESL (TAF, MLG); 13 Jan (1) Savannah Bottoms, HDC (DJS, G. Ned Piper); 26 Feb (1) SE OBC (MAG). Merlin: 17 Dec (1) ESL CBC (Howard Vogel); 8 Jan (1) PEF (John Densford). Peregrine Falcon: 17 Dec (1) MEM CBC (MTOS), 21 Feb (1) MEM (WAJ); 27 Feb (1) MEM (RTC).

Turkey-Nuthatch: Wild Turkey: 10 Feb (52), 13 Feb (46+), 21 Feb (80) SFP (VBR, SLL, NMS, HBD, CHB), although not high numbers for the park, the count is high for a group to see at one time; 26 Feb (9) DYC, (35) LKC (WGC). Lesser Yellowlegs: 9 Dec (6) ESL (JEW, MGW); 17 Dec (6) ESL (MTOS), third time for this species on a Christmas Count. Least Sandpiper: 3 Dec (544) ESL (MGW, VBR, CHB); 17 Dec (19) ESL CBC (MTOS). Bonaparte's Gull: 22 Dec (2) Savannah CBC (DJS); 16 Jan (38) PLS (MAG); 31 Jan (8) LKC (WGC); 4 Feb (25) OBC (MTOS); 17/18 Feb (39) REL, OBC (RLI, GLI); 21 Feb (50) REL, LKC (WGC). Ring-billed Gull: 30 Nov (275), 24 Jan (65) Is 13 (WGC); 3 Feb (400+) REL (JEW, MGW); 26 Feb (50+) SE OBC (MAG). Herring Gull: 2 Jan (2) Is 13; 3 Feb (1) E of Trenton (MAG); 16 Feb (1, 1st winter plummage) LKC (WGC). Barn Owl: 17 Dec (2) ESL (MGW). Common Screech Owl: 1 Feb (1) MEM (GRP, JKP); mid Dec/Jan, two rescued from fireplace MEM (Knox Martin, MGW). Great-Horned Owl: 15-26 Dec (pair on nest) DYC (WGC); 12 Feb (1) MEM (GRP, JKP).

Short-eared Owl: 1 Nov-EOP (1) Savannah Bottoms, HDC (DJS); 24 Feb (2) SE OBC (Robert Shannon); 27 Feb (1) same location in OBC (MAG); 20 Dec (1) West Sandy Creek, Tennessee NWR, HNC (PBH). American Crow: 10 Dec (63) MDC (JBC); 24 Jan (36,100) Jackson, MDC (JTOS); 26 Jan (50,000+) Jackson, MDC (RNW); 4 Feb (200) LKC (MTOS). Fish Crow: 2 Jan (1) Is 13 (WGC). Red-breasted Nuthatch: reported more often this year at feeders, numbers ranging from 1-4. White-breasted Nuthatch: 4 Feb (5) OBC (MTOS).

Wren-Grosbeak: House Wren: 17 Dec (3) MEM CBC (MTOS); 27 Jan (1) Savannah Bottoms, HDC (DJS). Winter Wren: 17 Dec (19) MEM CBC (MTOS). American Pipit: 17 Dec (14) MEM CBC (MTOS); 10 Feb (1) S of Trenton, GBC (MAG). Tree Swallow: 27 Feb (2) SE OBC (MAG). Pine Warbler: 9 Dec (2) PEF (JEW, MGW); 17 Dec (4) PEF (MTOS); 1 Feb (1) MEM (GRP, JKP); 10 Feb (4) PEF (JEW, MGW). Common Yellowthroat: 17 Dec (1) ESL CBC (MTOS). American Tree Sparrow: 3/4 Feb (3) LKC (Gilbert B. Beaver, MTOS); 18 Feb (6+) DYC (WGC). Chipping Sparrow: 17 Feb (1) Iris Hill, NE MEM (JAF, SCF). Vesper Sparrow: 22 Dec (2) Savannah CBC (DJS); 22 Feb (1) PEF (VBR). Le Conte's Sparrow: 9 Dec (2), 1 Jan (1) PEF (MLG); 17 Dec (2) MEM CBC (MTOS); 1 Nov-EOP (13) Savannah Bottoms, HDC (DJS), present through season with max on CBC. Lincoln's Sparrow: 22 Dec (1) Savannah CBC (DJS). White-crowned Sparrow: 1 Dec-EOP (16-35) PEF (JEW, MGW); 7 Feb (50+) mostly immature ESL (TAF); 10 Feb (22) feeder, DYC (WGC), seen more often in various locations this season. Lapland Longspur: 3 Dec (35), 20 Dec (4), 1 Jan (38+) PEF (MLG); 9, 22 Dec (2,24) Savannah Bottoms (DJS). Smith's Longspur: 3 Dec (30), 20 Dec (1), 1 Jan (1) PEF (MLG). Western Meadowlark: 4 Dec (1), 1 Jan (1), 20 Feb (1) PEF (MLG); 10 Feb (1), 11 Feb (1) PEF (JEW, MGW). Rusty Blackbird: 9 Dec (2) PEF (MLG, JEW, MGW); 22 Dec (73) Savannah CBC (DJS); 21 Jan-EOP (150+) PEF (JEW, MGW); 4 Feb (6) REL, OBC (MTOS); 25 Feb (35) PEF (VBR). Brewer's Blackbird: 1 Nov-EOP (71) Savannah Bottoms (DJS), max. Purple Finch: 10 Dec (1) 13-23 Jan (11-14) TIC (DDP); 24 Dec (3) MEM (GRP, JKP); 4 Feb (1) Trenton (MAG); 17 Feb (5) MEM (Anna Wessels). Finches and siskins were seen daily at feeders during the season. Overall numbers were lower than in previous years (RWP, VBR, MAW, RPF, GLI, RLI, DDP, Susan N. McWhirter). House Finch: 25 Dec (78) W of Trenton (MAG); Dec/Jan/Feb, Ben B. Coffey, Jr. banded 1,260 at Coffey Grounds, MEM. Pine Siskin: 23 Nov-19 Dec (6-157) TIC (DDP); 10 Jan-22 Feb (73-30) TIC (DDP); 13 Feb MEM (GRP, JKP); 2-21 Feb (3) MEM (WAJ). Evening Grosbeak: 8 Dec (3 m, 5 f) TIC (DDP).

Locations: BRF-Britton Ford, Tennessee NWR, Henry Co.; DYC-Dyer Co.; ESL-Ensley Sewage Laggons, Shelby Co.; GBC-Gibson Co.; HAC-Hardeman Co.; HDC-Hardin Co.; HNC-Henry Co.; Is 13-Island 13, Joe Echles Towhead, Lake Co.; LKC-Lake Co.; MDC-Madison Co.; MEM-Memphis, Shelby Co.; OBC-Obion Co.; PEF-Penal Farm, Shelby Co.; PLS-Paris Landing State Park, Henry Co.; REL-Reelfoot Lake, Obion and Lake Cos.; SFP-Shelby Forest State Park, Shelby Co.; TIC-Tipton Co.

MARTHA G. WALDRON, 1626 Yorkshire Drive, Memphis, TN 38119

HIGHLAND RIM AND BASIN REGION - The season's weather was generally mild with the notable exception of an extremely cold December. An extended period of cold, starting in mid-December and lasting through the end of the month, was experienced across the region. Temperatures as low as -8 degrees F were recorded in Nashville. Precipitation was significantly below normal for the period. December precipitation was less than half the normal amount, although heavy ice storms occurred during the cold snap.

Pine Siskins were reported in good numbers from all parts of the region, as were Red-breasted Nuthatches. Purple Finches were present only in small numbers and Evening Grosbeaks were virtually absent.

Rarities in the region included a White-winged Crossbill that visited a feeder in Clarksville, a Great Black-backed Gull on Percy Priest Lake, a rare winter record of a Dickcissel, also in Clarksville, and 5 Short-eared Owls that wintered on a field in Maury Co.

Grebe-Merganser: Horned Grebe: 16 Jan (34) WDR (MDH), max. Greater White-fronted Goose: 14 Dec (3) Manchester Industrial Park, CFC (DLD), ers; 16 Dec (3) AEDC (DLD); 23 Dec (3) Arrow Lake, MUC (GRM). Snow Goose: 7 Dec (16, 6 blues and 10 whites), ers and max. Ring-necked Duck: 10 Dec (200) Ovoca Lke, CFC (MDH), max. Greater Scaup: 15 Feb (2 f) Dyson's Ditch, Cheatham Co. (WJC). Oldsquaw: 9 Dec (1 f*) pond at Manchester Industrial Park, CFC (DLD). BLACK SCOTER: 10 Dec (4*, 3 m and 1 f) WDR (MDH). White-winged Scoter: 10 Dec (2*, 1 m and 1 f) WDR (MDH). Red-breasted Merganser: 2 Dec (250) WDR (DLD, RWL), max. Common Merganser: 16 Jan (5) Normandy Res., CFC (MDH), max.

Eagle-Gull: Bald Eagle: 12 Jan (2) WDR (ELR, MDH); 14 Jan (2) Normandy Res., CFC (CWP, JHP). Rough-legged Hawk: 9 Jan (1) MTC (WJC), only report. Merlin: 1 Jan (1) PPL, DVC (WJC), this bird was present throughout much of the period, a Merlin has been observed in the same area at least three consecutive winters. Peregrine Falcon: 27 Feb (1) downtown Nashville, DVC (PBH), this bird has been observed through out the season by various observers. Sandhill Crane: 28 Dec (2) WDR (BWL); 26 Jan (2) WDR (BWL); 14 Feb (30) BAH (RWS); 17 Feb (30) Castalian Spring, RUC (BWL); 27 Feb (50) BAH (RWS), max. GREAT BLACK-BACKED GULL:1 Jan (1 im*) PPL, DVC (WJC, Joesph Stone).

Owl-Crossbill: Short-eared Owl: 20 Jan-25 Feb (2-5) Zion Acres, MUC (Brad Hammond, GRM), max. Tree Swallow: 24 Feb (2) WDR (DLD), ers. Red-breasted Nuthatches: reported from several locations across the region, present through out period. Bewick's Wren: 19 Feb (1) Brinkley Rd., RUC (TJW), only report. American Pipit: 27 Feb (22) Ovoca Lake, CFC (MDH), max. DICKCISSEL: 29 Dec -21 Jan (1*) Clarksville, MTC (ALH, NRH). Vesper Sparrow: 6 Jan (1*) Asbury Lane, RUC (TJW). Purple Finch: present in small numbers across the region through out period. WHITE-WINGED CROSSBILL: 22 Feb (1*) Clarksville, MTC (Ellen J. Walker), observed at close range as it visited a feeding station in a residental area, excellent written documentation. Pine Siskin: present in good numbers at feeding stations across the region, particularly during the early part of Dec.

Locations: AEDC-Arnold Engineering Development Center, Coffee Co.; BAH-Barnes Hollow, Putnam Co.; CFC-Coffee Co.; DVC-Davidson Co.; MTC-Montogomery Co.; MUC-Maury Co.; PPL-Percy Priest Lake; RUC-Rutherford Co.; WDR-Woods Reservoir, Franklin Co.

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EASTERN RIDGE AND VALLEY REGION - The extremes of winter weather were displayed this season, a very cold December was followed by a very mild January and February. As would be expected, conditions varied considerably from the north end of the region to the south end, but general trends were the same. December was the coldest on record for that month in the Johnson City area, with three consecutive nights below 0 degrees F on December 21-23; while in Chattanooga, "the temperature dipped to a low of 4 degrees F on the 17th and remained cold for the next several days". Five snowfalls totaling 9 inches during December in Johnson City was not unusual; but little or no melting occurred in between, resulting in a completely snow-covered landscape from December 12-30, an unusually long period. "There was no significant snowfall" in Knoxville and only a trace on two days in Chattanooga. Following this, January and February were both much warmer than normal. There were several scattered days of 60-70 degrees F and "few nights when temperatures dropped below 20 degrees F". A light snowfall in Johnson City on January 25 was the only one recorded in these two months. Precipitation for the season was above average, ranging from +7% in Johnson City (11.3 in) to +39% in Chattanooga (20.9 in.). Rainfall totals for 1989 were also above average, ranging from +13% in Johnson City (46 in.) to +36% in Chattanooga (71 in.), thus apparently ending the drought years of the mid to late 1980s. Lake levels in the Knoxville area and northeastward were kept higher than normal this winter and some were partially frozen during December.

A wide variety of birds were reported from the region this winter, from several rare northern and/or western visitors to a few "half-hardy lingerers". The cold and snow of December probably accounted for the Rough-legged Hawks, Long-eared Owl, American Tree Sparrow, Harris' Sparrow, and Lapland Longspur. Other rarities included Greater White-fronted Goose, Great Black-backed Gull, and Le Conte's Sparrow. For the second year in a row, several Rufous Hummingbirds were present at feeders; but all four apparently succumbed to the cold. A phoebe, House Wren, Palm Warbler, and Dickcissel survived the prolonged cold and snowcover of the Johnson City area. There were good numbers of cormorants, most waterfowl (including three reports of Oldsquaw) and Horned Lark, among others. However, American Pipits and the locally wintering shorebirds were in reduced numbers. Two boreal irruptives, Red-breasted Nuthatch and Pine Siskin, were widespread and numerous. Four Brown-headed Nuthatches in Cumberland County were well north of their known range. These observations and more made for an interesting season. Read on!

Loon - Heron: Common Loon: 4-25 regular on CHL (KHD, LHD); 2 Jan (8) CRL (RLK). Pied-billed Grebe: 14 Jan (180) CHL (KHD, LHD), max. Horned Grebe: 8 Dec (37) BOL (RLK), large number for JNC area; 6 Jan (46) CHL (KHD, LHD), max. Double-crested Cormorant: 1-6 regular at CHL and HRA (KHD, LHD); 6 Dec (1) Kingsport, Sullivan Co. (Arthur Smith); 10 Jan (1) BOL (RLK); 13 Jan (7) Watts Bar Lake, Meigs, Rhea and Roane Cos. (Burt Jones, Paul Hartigan); 18 Feb (5) Tellico Lake, Monroe Co. (ARH, RDH et al.). Great Egret: 2 Dec (6) Rankin Bottoms, Cocke Co. (JAK). Green-backed Heron: 18 Dec (1) Fort Loudoun Dam, Loudon Co. (JAK).

Waterfowl: Tundra Swan: 1 Jan-4 Feb (2 im) HRA (m. ob.). Mute Swan: 27 Dec -6 Jan (1-7) CHL (Donald L. Rush, Jr. et al), 2nd CHA area record, origin unknown.

Greater White-fronted Goose: 2-3 Dec (1) McDonald, GNC (JAK, ARH, RDH); 26 Dec (1) NIL (RJH); 27 Jan-10 Feb (2) HRA (KHD, LHD, PCH, et al). Snow Goose: 26 Dec (2 blue) NIL (RJH); 10 Jan (1 white) Jenkins Bridge, Hawkins Co. (DCC); 30 Jan (1 blue, 1 white) Soddy Lake, HLC (AMJ); 31 Jan (6 white) HRA (TWRA). Canada Goose: 8 Feb (2345) HRA (TWRA), max. Green-winged Teal: 27 Jan (130) Douglas Lake, Jefferson Co. (JAK), max. American Black Duck: 14 Dec (1400) HRA (TWRA), max. Mallard: 14 Dec (4374) HRA (TWRA), max. Northern Pintail: 2 Dec (50) HRA (KHD, LHD), max. Northern Shoveler: 2 Dec (14) HRA (KHD, LHD), max. Gadwall: 14 Dec (738) HRA (TWRA), max. American Wigeon: 14 Dec (321) HRA (TWRA), max. Canvasback: 2 Dec (15) NIL (RJH), max. Redhead: 10 Feb (100) CHL (RJH), max. Ring-necked Duck: 14 Dec (227) HRA (TWRA), max. Greater Scaup: 14 Jan (275) CHL (KHD, LHD), max; 4 Jan -11 Mar (5) JNC (RLK et al), unusual overwintering record there. Lesser Scaup: 2 Jan (75) CRL (RLK), max. Oldsquaw: 27 Dec (2 shot) Fort Loudoun Lake, KNC (fide CPN); 21 Jan (1) CHL (KHD, LHD); 7 Feb (7) Tellico Lake, Monroe Co. (ARH, RDH). White-winged Scoter: 14-15 Jan (1) CHL (KHD, LHD). Common Goldeneye: 27 Jan (150) CHL (KHD, LHD), max. Bufflehead: 27 Jan (40) CHL (KHD, LHD), max. Hooded Merganser: 2 Dec (135) HRA (KHD, LHD), max. Common Merganser: 5 Jan (1) BOL (BLC, Frank Ward, Glenn Swofford); 28 Jan (1) CHL (LHD, Angela C. Davis); 11 Feb (8) HRA (KHD, LHD); only reports. Red-breasted Merganser: 2 Dec (235) CHL (KHD, LHD), max; 8 Dec (175) BOL (RLK), large number for JNC area. Ruddy Duck: 27 Jan (31) CHL (KHD, LHD), max, well below previous wintering numbers.

Osprey-Crane: Osprey: 12 Jan (1) HRA (Carl W. Campbell). Bald Eagle: 1 Feb (1) BOL (FJA). Northern Harrier: 6/17 Dec (1) GNC (Jim Holt); 8 Jan (1) Hawkins Co. (DCC); 9-10 Jan (1) AUS (BLC, RLK); all in northeastern portion of the region. Sharp-shinned and Coooper's Hawks: near normal numbers in JNC area (fide RLK). ROUGH-LEGGED HAWK: 22 Dec (1 dark phase) U.T. Plant Science Farm, KNC, (JAK); 27 Dec (1 light phase) Tri-cities Airport, Sullivan Co. (BLC); 2 other reports late in the season were not documented. Golden Eagle: 18 Jan (1 im) HRA (DCC); 28 Jan (1) Chester Frost Park, HLC (PCH et al.). American Coot: 8 Feb (1055) Watts Bar Lake, Meigs, Rhea and Roane Cos. (TWRA), max. Sandhill Crane: up to 66 wintered at HRA; 11 Feb (150) HRA, earliest migrants, see Spring report (all fide KHD).

Killdeer-Hummingbird: Killdeer: 2 Dec (111) HRA (KHD, LHD), max, relatively low. Least Sandpiper: 8 Dec (1) BOL (RLK), first JNC area winter record; only 1-4 at usual SAB wintering site (KHD). Dunlin: 15 Jan (55) HRA and 25 Feb (5) SAB (KHD, LHD), max at usual wintering sites. Common Snipe: 25 Feb (37) SAB (KHD, LHD), max. American Woodcock: 24 Jan (6) Moccasin Bend, HLC, (RJH); 11 Feb (1) WGC (FJA); 23 Feb (1) GNC (Richard and Willie Ruth Nevius). Bonaparte's Gull: 16 Jan (300) CHL (AMJ), max. Ring-billed Gull: 2 Jan/11 Feb (1900/3400) CRL (RLK); 16 Jan (700) CHL (AMJ), max there; 13 Feb (1758) BOL (BLC), a record high count there. GREAT BLACK-BACKED GULL: 24 Dec (1 ad) CHL (ARH, RDH), about 6th state record, first ad reported. Barn Owl: 20 Jan (2) Tusculum College, GNC (Jim Holt); 1-2 each at sites in JNC and Gray, WGC (RLK, Dan Huffine). LONG-EARED OWL: 5 Feb (1) Leesburg, WGC (RLK), number of pellets under roost indicated that it had been present for 3-4 weeks; 9th regional record, 3rd northeast of KNC. RUFOUS HUMMINGBIRD: ad male

reported in the fall at CHA was last seen 16 Dec (fide KHD); 22 Oct-23 Dec (1 ad female) northeast KNC (fide JBO); 2 others, probably Rufous, were reported at Morristown, Hamblen Co., from late Sep to 24 Dec and at Fairfield Glade, Cumberland Co., until 15 Dec (both fide JBO); all were last seen during very cold period and presumed dead.

Phoebe-Pipit: Eastern Phoebe: 5 Jan (1) AUS (RLK), survived the prolonged snowcover in northeast portion of region. Horned Lark: 17 Dec (65) Speedwell, Claiborne Co. (GWM); 23 Dec (9) Amnicola Marsh, HLC (RJH); 27 Dec (150) Doake's Pond, Campbell Co. (GWM); 28 Dec (1) Norris, Anderson Co. (CPN); regular at Limestone, WGC, max 2 Jan (354) (BLC), record high count for JNC area; 5 Jan (75) CKN (RLK); 15 Jan (30) HRA (KHD, LHD), more reports than normal. Tree Swallow: 10 Feb (1) CHL (RJH), early spring arrival. Common Raven: 14 Jan (2) CKN (RLK), low elevation near mountains. Red-breasted Nuthatch: widely reported in small numbers, even to CHA. BROWN-HEADED NUTHATCH: 28 Feb (4) Fairfield Glade, Cumberland Co. (Roger S. Doxey), well out of range. House Wren: 15 Jan (1) AUS (RLK); 22-23 Jan (1) Moccasin Bend, HLC (RJH, DCC). Brown Creeper, Winter Wren, both kinglets and Hermit Thrush: all in good numbers in the JNC area throughout the season (fide RLK). Eastern Bluebird: few seen in the JNC area during the snow and cold of Dec caused concern, but fair to good numbers were seen when conditions improved (fide RLK). American Pipit: only a few reports of 1-2 in the JNC and CHA areas (fide RLK, KHD).

Warbler-Grosbeak: Pine Warbler: 21 Feb (1) Bays Mountain, Sullivan Co. (FJA), early arrival. Palm Warbler: 1 Dec (1) AUS (RLK), late lingerer; 5 Jan (1) CKN (RLK). DICKCISSEL: 26 Dec-19 Jan (1 female at feeder) JNC (RLK), although about the 50th winter record for the state, this was just the third for this region. AMERICAN TREE SPARROW: 5-9 Jan (2) AUS (RLK, BLC), first in JNC area since cold winters of the late 1970's. LE CONTE'S SPARROW: 13 Jan (1) Marion Co. (PCH, RJH). Fox Sparrow: 5 Jan (8) CKN (RLK), max. HARRIS' SPARROW: 19 Dec-6 Jan (2, ad and im at feeder*) Albany, GNC (Richard Nevius, Virginia Williams, Helen Reed), 5th regional record, 2nd in GNC. LAPLAND LONGSPUR: 17 Dec (1) Speedwell, Claiborne Co. (GWM), with Horned Larks. Purple Finch: low numbers throughout region, with a modest influx during Dec (m. ob.). Pine Siskin: widespread & abundant, up to 200-400 at some feeders (m. ob.). Evening Grosbeak: 9 Dec-5 Jan (1) Sewanee, Franklin Co. (Jerry Ingles); 3-4 reports each of 1-10 birds in Blount Co. (JBO, JAK) & JNC area (FJA, JWB).

Locations: AUS-Austin Springs, Washington Co.; BOL-Boone Lake, Sullivan and Washington Cos.; CHA-Chattanooga; CHL-Chickamauga Lake, Hamilton Co. portion; CKN-Conklin, Washington Co.; CRL-Cherokee Lake, Grainger and Hamblen Cos. portion; GNC-Greene Co.; HLC-Hamilton Co.; HRA-Hiwassee River Area, primarily Meigs Co., but also Bradley, McMinn and Rhea Cos.; JNC-Johnson City; KNC-Knox Co.; NIL-Nickajack Lake, Marion Co.; SAB-Savannah Bay, Hamilton Co.; WGC-Washington Co.

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EASTERN MOUNTAIN REGION - The weather for the period started out cold, but then turned into a very mild winter. December temperatures were well below normal, 4 consecutive days of below zero temperatures occurred just before

Christmas. January and February were extremely mild with average temperatures 6.6 and 7.5 degrees above normal, respectively. There were no large snowfalls during the period. Precipitation was about normal for December and January. February was above normal.

Waterfowl numbers were up from last year, but still low. The Rufous Hummingbird reported last period apparently succumbed to late December sub-zero temperatures. Brown Creepers, Winter Wrens, kinglets, and Hermit Thrushes were in good numbers. Winter finches were scattered and in low numbers, except for a major invasion of Pine Siskins.

Loon-Merganser: Common Loon: 9 Jan (5) WTL (RLK); 13/16 Jan (3, 5)/ 13 Feb (4) SHL (RLK/BLC). Horned Grebe: 30 Jan (2) WTL (RLK), only report. Double-crested Cormorant: 16 Jan (1) SHL (RLK). Swan sp.: 16 Jan (2) Nolichucky River, Unicoi Co. (Rad Mayfield). Green-winged Teal: 30 Dec (1) BRI CBC (KH, BH, LH). American Black Duck: 30 Dec (128) SHL BRI CBC (JWC, et al.), max, otherwise low numbers. Ring-neckd Duck: 16 regular on WIL thru Dec, declined in Jan (m. ob.). Lesser Scaup: 22 Dec (1) WIL ELI CBC (RLK, BLC); 13 Feb (2) SHL (BLC), only reports. OLDSQUAW: 4 Dec (3) SHL (BLC). SURF SCOTER: 15 Jan (1) SHL (BLC). Common Goldeneye: 27 Jan (9) WTL (GOW), only report. Bufflehead: 9 Jan (105) WIL (RLK), max. Hooded Merganser: 30 Dec (42) SHL BRI CBC (JWC, RPL, BLC); 9 Jan (6) WTL (RLK); 7/11 Feb (7/4) Ripshin Lake, Carter Co. (CFW/JWB). Red-breasted Merganser: 8 Dec (83) WTL (BLC); 9 Jan (1) WTL (RLK).

Eagle-Waxwing: Bald Eagle: 4 Dec (1 ad, 1 im), 13 and 15 Jan (1 ad) SHL (BLC, RDL); 30 Dec (1) BRI CBC (KH, BH, LH); 8 Feb (1) RNM (BLC, CFW, RLK). GOLDEN EAGLE: 9 Jan (1) Big Bald Mtn., Unicoi Co. (Rad Mayfield); 6/11 Feb (1 ad) RNM on balds (BLC/Tom McNeil); PEREGRINE FALCON: 6 Feb (1 ad)/8 Feb (1, probably im) RNM (BLC/RLK, BLC, CFW). Common Snipe: a few, as usual, wintered along WTR (m.ob.). American Woodcock: 17 Feb (2) SHL (RPL), ers. Great Horned Owl: 30 Dec (23) SHL BRI CBC (JWC, RPL, BLC), max, encountered 22 in 1.5 hour period. RUFOUS HUMMINGBIRD: 23 Dec (1 ad) Unicoi, Unicoi Co., bird reported last period was last seen on this date in sub-zero temperatures. Eastern Phoebe: 22 Dec (4) ELI CBC (m.ob.), during very cold conditions; 30 Dec (3) BRI CBC (JWC, RPL, BLC); 9 Jan (1) WTL (RLK). Common Raven: 23 Feb (23) RNM (RLK, BLC, CFW), all seen at one time; two seen through period at low elevation in Paperville Knobs area, Sullivan Co. (RPL). Red-breasted Nuthatch: modest numbers scattered throughout (m.ob.). House Wren: 22 Dec (1) ELI CBC (GOW, RDL). Eastern Bluebird: low in Dec, but better numbers in Jan and Feb. Brown Thrasher: 22 Dec (1) Butler, ELI CBC (GOW, RDL); 9 Jan (1) Little Milligan, Carter Co. (RLK). Cedar Waxwing: flock of 300+ in late Dec, SHL (RPL).

Warbler-Grosbeak: Yellow-rumped Warbler: 9 Jan (120+) WTL (RLK), max. Savannah Sparrow: 3 Feb (2) Roan Mtn. State Park, Carter Co. (KH, BH, LH, Alan Gantzhorn). Fox Sparrow: scattered reports of 1-2. Song Sparrow: 17 Feb (1) Engine Gap, RNM (RLK, et al), unusual at this high elevation. SNOW BUNTING: 3, 14 Jan, 8 Feb (1) Round Bald, RNM (RLK, m.ob.). Rusty Blackbird: 22 Dec (5 birds in 2 parties) ELI CBC, only report. Purple Finch: low, only a few scattered birds. Red Crossbill: 29 Dec (30) RNM CBC (BLC), not seen on RNM in Jan-Feb;

9 Jan (1) Cove Ridge, Johnson Co. (RLK). WHITE-WINGED CROSSBILL: 29 Dec (20) RNM CBC (BLC). Pine Siskin: major invasion, 100+ at many feeders. Evening Grosbeak: 29 Dec-EOP (up to 100) RNM in spruce fir forest (RLK, et al), only 3-4 lowland sightings.

Locations: BRI-Bristol; ELI-Elizabethton, RNM-Roan Mountain, Carter Co.; SHL-South Holston Lake area, Sullivan Co.; WIL-Wilbur Lake, Carter Co.; WTL-Watauga Lake, Carter Co.; WTR-Watauga River, Carter Co.

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ISSN 0026-3575

THE MIGRANT

A QUARTERLY JOURNAL
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EPTEMBER 1990
VOL. 61, NO. 3

THE MIGRANT

A QUARTERLY JOURNAL OF ORNITHOLOGY

FIRST ISSUE PUBLISHED IN JUNE 1930

PUBLISHED BY

THE TENNESSEE ORNITHOLOGICAL SOCIETY

Founded at Nashville, Tennessee on 7 October 1915
The T.O.S. is a non-profit, educational, scientific,
and conservation organization.

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Published quarterly (March, June, September, and December).
Printed by Tennessee Industrial Printing Services, Inc., 51 Miller Ave., Jackson, TN 38305.

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THE MIGRANT

Published by the Tennessee Ornithological Society,
to Record and Encourage the Study of Birds in Tennessee.
Issued in March, June, September, and December.

VOL. 61 September 1990 NO. 3

The Migrant, 61(3):65-66, 1990.

FIRST TENNESSEE RECORD OF WHITE-FACED IBIS

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A flock of 28 adult White-faced Ibis (*Plegadis chihi*) was present at the T.E. Maxson Sewage Lagoons in southwest Shelby County on 19 April 1990. The birds were feeding in tall vegetation on the edge of a shallow lagoon during the late morning hours and in the afternoon. Initially Carolyn H. Bullock and I observed a flock of 19 White-faced Ibis at 1100.

Lighting conditions were excellent and the birds were observed as close as 18 m with Bushnell 20-60x spotting scopes, Swift Audubon 8 x 40 binoculars and Bausch and Lomb 8 x 42 binoculars.

All of the birds were in adult plumage with a white feathered area around the red facial skin. The red was easily observable. The bills were gray, not having acquired the deep red coloration characteristic of full breeding condition. The legs were deep red.

Figure 1. Flock of White-faced Ibis in Shelby Co., Tennessee, 19 April 1990.

The birds were observed in various standing and resting positions as they fed and preened. Occasionally some of the birds would fly away for a short distance and then return to the flock. We were close enough to hear a grunting or croaking note made by one of the birds. Several photographs were taken by Mrs. Jo Levy (Fig. 1). My most recent experience with White-faced Ibis was five days earlier while birding at Cheyenne Bottoms in Great Bend, Kansas where I observed and photographed a flock of 30-40.

This is the first record of White-faced Ibis in Tennessee. White Ibis (*Eudocimus albus*) and Glossy Ibis (*Plegadis falcinellus*) have been reported numerous times (Robinson, J.C. 1990. An annotated checklist of the birds of Tennessee. Univ. Tenn. Press, Knoxville, pages 41-42.)

Accepted 8 June 1990.

The Migrant, 61(3)66, 1990.

FIRST RECORD OF SCISSOR-TAILED FLYCATCHER IN THE GREAT SMOKY MOUNTAINS NATIONAL PARK

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On the morning of 4 June 1989, a class of 18 students and I observed an adult Scissor-tailed Flycatcher (*Tyrannus forficatus*) in Cades Cove (Blount Co., Tennessee) in Great Smoky Mountains National Park. We were walking south on Sparks Lane about 100 m south of the point where Abrams Creek crosses the road in open country characterized by grazed grassy fields bordered and bisected by barbed-wire fences. While scanning the fences for Eastern Kingbirds (*Tyrannus tyrannus*) I first saw the Scissor-tailed Flycatcher at a distance of about 400 m. The class and I moved to approximately 15 m from the bird and noted details. The bird's most distinctive feature was its long, deeply-forked tail which was blackish with white outer borders. The belly, breast, head, neck, back and scapular areas were a whitish to pearly gray. The folded wings, upper tail coverts and tail were blackish. The flanks and underwing linings were salmon pink shading to reddish in the axillaries (the latter seen when the bird was in flight). We watched the bird at close range for more than 15 minutes. It seemed to ignore us and behaved naturally, perching on the fence, hawking insects and preening. The bird was in excellent plumage and appeared to be in good health. We first sighted the bird at about 1045; total observation time was approximately 35 minutes. As we walked away the bird remained perched on the same fencerow where we had found it. Weather conditions were excellent with bright sunlight and scattered clouds, a light wind, and a temperature of 24°C. Several of the students searched for the bird in Cades Cove the following morning but were unsuccessful. To my knowledge, the bird was not seen again in the park after 4 June.

Accepted 1 March 1990.

The Migrant, 61(3)67, 1990.

SOME EARLY RECORDS FROM GRAND JUNCTION, HARDEMAN COUNTY, TENNESSEE

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Andrew A. Allison, a pioneer naturalist of south Mississippi and Louisiana, spent a month in northeast Mississippi in 1904. Evidently he changed trains at Grand Junction, Tennessee, and I present his observations there as given in his "Notes on the Spring Birds of Tishomingo County, Mississippi" (*The Auk*, 24:13[12-25, 1907).

Red-breasted Nuthatch (1) 16 April; Bewick's Wren (pair) 17 May; Wood Thrush (1) 16 April; Philadelphia Vireo (1) 16 April; Orchard Oriole (several) 16 April; Baltimore (Northern) Oriole (1) 16 April.

I included some information on Rev. Allison in *The Migrant* 1943:71. A more detailed biographic commentary was published in the *MOS Newsletter* Nov. 1961:1-3.

Accepted 29 August 1990.

The Migrant, 61(3)67, 1990.

BANDED SHARP-SHINNED HAWK RECOVERED AT SHERWOOD, TENNESSEE

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Michelle Patterson, a student in Sewanee Elementary School, found a dead hawk in her yard in Sherwood, on 28 February 1990. She had previously seen it flying near her home, but it struck a window later that day. She brought it to school on 1 March, and Mary Priestly, her science teacher contacted me. It is an adult (barred breast and red-eye iris) Sharp-shinned Hawk (*Accipiter striatus*), and dissection showed it to be a female. It bore a band on its right tarso-metatarsus with number 1443-03276. It was in good physical condition, but its gizzard was empty. Most species of birds have only the right ovary developed, but this specimen had two ovaries, as is typical for hawks of genera *Accipiter*, *Circus*, and *Falco*. I have state and federal permits to salvage birds, therefore it was mounted for study and talk illustration.

The Fish and Wildlife Service, Bird Banding Laboratory reported that it had been banded by Mr. J. F. Gumbs of Newton, New Jersey, on 10 October 1988. Mr. Gumbs has written me that this female was caught in a mist net at the Delaware Water Gap Raptor Banding Station in Northern New Jersey. Its plumage indicated that it was at least into its third full year, when captured. Mr. Gumbs believes that it was at least five years old at the time of its death.

Accepted 3 July 1990.

The Migrant, 61(3)68, 1990.

IN MEMORIAM: SUE BELL

Elizabeth Collins

The following was read on 13 September 1990 at the first fall meeting of the Nashville T.O.S. chapter:

"Our friend Sue Bell will not be with us tonight for this first Fall Flocking. However, those of us who knew her well can assure you that she is with us in spirit. Her love of nature, her wide knowledge of birds and their habits, her sustained interest in the cultivation of wild flowers and her love of her fellow man — all these things comfort us and reassure us of her presence among us.

Sue joined T.O.S. in 1949 and through the years was a loyal supporter and enthusiastic participant in all of its activities. She served as: President of both the local chapter and the state organization, a long-time member of the Records Committee, doyenne of the Hawk Watch, and hostess *extraordinaire* to numerous T.O.S. gatherings.

Firm in her opinions, intelligent in her research, forthright in personality, we remember her tonight with honor, respect and abiding love."

The Migrant, 61(3)68, 1990.

BOOK REVIEW

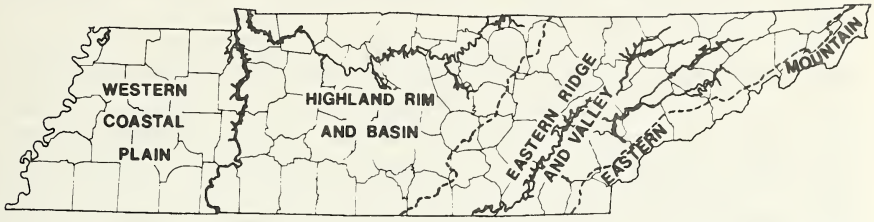
AN ANNOTATED CHECKLIST OF THE BIRDS OF TENNESSEE. John C. Robinson. The University of Tennessee Press, Knoxville. 274 pp. $29.95.

The goals of the author, as summarized from the introduction, were: to provide a list of all species which have been reported in Tennessee; to provide information on the abundance, habitat, and dates of occurrence for each species; to encourage the study of birds in Tennessee; and, to serve as a reference for researchers. The majority of the book (212 pages) deals with accounts of individual species. For permanent residents, the descriptions of the status and abundance are followed by remarks about habitat, high counts and method of substantiation. The same types of information are given for transients and other non-permanent residents, but additional information is given on arrival and departure dates along with comments on unusual sightings. An appendix contains 33 species maps; the small number of maps and the subjective nature of their selection and content limits the usefulness of this section. This book is not a guide to identification; neither does it provide the details of nesting habits, distribution and numbers that are currently being assembled in the TOS Breeding Bird Atlas project. This is not a report of original data. The book is a compilation of published reports; most of the records were taken from *The Migrant* (1930-1988). In the species accounts no attempt was made to list all reported sightings of each species. As is probably true for any book of this type, some references to historical accounts or sightings in adjacent states were not included. This book is the logical beginning place for anyone who wishes to know whether their observations of a particular species in Tennessee are typical of published accounts; the comments in the introduction about noteworthy sightings will help observers determine how to appropriately report their data. — T. David Pitts

The Migrant, 61(3):69-80, 1990

THE SEASON

Robert P. Ford, Editor



SPRING: 1 MARCH - 30 MAY 1990

The passage of birds through Tennessee was considered about average this spring, although a few extreme dates and rarities were reported. Swainson's Warblers made a healthy showing, unprecedented numbers were discovered in middle Tennessee. Most other migrants appeared much as expected, both for species and numbers of individuals. In consideration of reports about declining populations of neotropical migrants, even the status quo can be encouraging. However, not all species are declining at the same rate or face the same pressures. This group of birds deserves our unending study and conservation efforts. The first step is best accomplished through accurate field observations, such as those reported below.

Other reports this spring were more exciting. Nationwide, White-faced Ibis travelled farther east and north than usual this year. Tennessee was part of the expansion in a big way, the first state record for this species consisted of a flock of 28 individuals in Shelby County. Two other species successfully nested in Tennessee for the first time this spring. Sora chicks with an adult were located in west Tennessee for a new state record. Meanwhile, in east Tennessee a Pine Siskin fledgling was discovered.

Weather patterns were variable across the state. Middle Tennessee was drier than normal, while the eastern portions were a bit wetter. Temperatures were relatively warm early, but then cooled later in the spring. Such "normal" weather this spring possibly encouraged more birders into the field, resulting in a long report this season. Both rewarding and disappointing observations were made this spring, I encourage you to continue reading!

Abbreviations used in the following report include: ad-adult; b-banded; EOP-end of period; ers-earliest reported sighting; et al.-and ohers; f-female; fide-reported by; im-immature; in-inches; m-male; max-maximum number of individuals counted in 1 county in 1 day; m. ob.-many observers; NWR-National Wildlife Refuge; ph-photo documentation; yg-young; * -record has been documented.

WESTERN COASTAL PLAIN - Two state records were generated this spring, the first occurrence of White-faced Ibis and the first breeding of Sora in Tennessee. A Cedar Waxwing was observed building a nest near Martin during the foray this year. Sightings in west Tennessee were more regional as TOS members in and near Jackson and Dyersburg contributed observations. Habitat preservation in Shelby County was enhanced with the T.E. Maxson Treatment Plant designated as an

EARTH complex. The sludge ponds located there are now a bird sanctuary marked by signs with the Black-necked Stilt logo, a recurrent nester at the "pits". The Chickasaw National Wildlife Refuge was also enlarged by a donation of additional acres by the Nature Conservancy.

Grebe-Vulture: HORNED GREBE: 1/5 Mar (1) LKC (WGC); 16,18 Mar (1) Phillipy Pits (WGC, MLG); 29 Mar (1) HWR, HYC (LVC, JBC, MJU); 30 Mar (1) HWR, HYC (EKW). Double-crested Cormorant: 7 Mar (10) Robco Lake, SBC (LCC, HBD, SSL, VBR, CHB, BHW), 18/23 Mar (165/55) LKC (WGC); 30 Mar (10) HWR, HYC (EKW); 11 Apr (2) Crockett Bottoms, OBC (JTOS); 19 Apr (300+) Levee and REL, LKC (SDL, TDP, JCG, MAG); 21 Apr (15) PAP (SDL, JCG, MAG); 25 Apr-3 May (4-617) LKC (WGC). American Bittern: 22 Apr (1) Hwy 70 at Muddy Creek, HYC (RPF); 20 May (1) ESL (MLG). Great Egret: 6 Mar (1) MEM (RTC), early. WHITE-FACED IBIS: 19 Apr (28) ESL (*MGW, *CHB, JLL, Dwight Miller, m.ob.), first state record, documented with photos by Jo Levy. White-fronted Goose: 29 Apr (1 ad) DYC (WGC), late. Canada Goose: 1 Mar (1200) OBC (WGC). American Black Duck: 4 Mar (30) BRF (MJU, JLW). Redhead: 4 Mar (11) BRF (MJU, JLW). Ruddy Duck: 18/20 Mar (1500+) REL, OBC (MAG, MLG, EKW). Black Vulture: 23 Mar/8 May (7/8) REL/KY (WGC), 27/28 Mar (4/7) DYC, TWMA (WGC); 16 May (1) HNW (JBC, LVC). Turkey Vulture: 18 Mar-8 May (14-7) REL (WGC); 22 Mar (1) PEF (VBR); 11 Apr (1 on nest) Crockett Bottoms (JTOS); 16 May (4) HWR, HYC (JBC, LVC).

Osprey-Tern: Osprey: 18 Mar (2) OBC (MLG); 20 Mar (2) REL, OBC (MAG, EKW); 29/30 Mar (1) HWR, HYC (JBC, MJU, RPF, MAG); 25 Apr-25 May (2 on nest) REL, LKC (WGC) nest destroyed by tornado 25 May (WGC); 8/10 May (2) Tatumville, (1) Macedonia Bottoms, GBC (MAG). Mississippi Kite: 5 May (102) SFP (TOS); 10/13 May (24/18) Millsfield, DYC (WGC); 12 May (3) Big Cypress Tree Natural Area, WEC (MAG); 16 May (1) HNW (JBC, LVC). Bald Eagle: 23 Mar-8 May (2 ad, 1 im) LKC (WGC). Sharp-shinned Hawk: 4 Mar (1) PEF, 18 Apr/5 May (1) SFP (HBD, CHB, VBR, NMS); 29 Apr (2) SFP (MTOS); 3 May (1) REL, LKC (WGC). Cooper's Hawk: 15 Apr (1) SFP (DDP); 11 May (1) GBC (MAG, SDL). Broad-winged Hawk: 18 Apr (6) MEM (VBR, HBD, CHB, NMS); 29 Apr (4) SFP (MTOS). King Rail: 24 Apr (1) REL, LKC (SDL, JCG, MAG), early. Virginia Rail: 6 May (1) ESL (MLG). Sora: 18 Mar (3) Macedonia Bottoms, GBC (MAG, SDL); 19 Apr-6 May (2) ESL (MTOS); 12 May (3) ESL (MLG); 17 Apr-EOP (1 ad, 2 yg) ESL (*MGW, JEW, VBR, CHB), first documented breeding in state, details will be published seperately. Black-necked Stilt: 26 Apr-EOP (2-8) ESL (m. ob.). Common Moorhen: 12 May (1) ESL (MLG). Semipalmated Plover: 16 Apr-13 May (2-23) ESL (MGW, JEW, CHB, VBR). Lesser Golden Plover: 4-24 Mar (7-590) REL, 21 Mar (1000+) DYC (WGC); 18 Mar (29) OBC (MLG); 5/25 Apr (35/38) Phillipy (WGC); 13 May (1) DYC (WGC), late. Black-bellied Plover: 27 May (2) Hwy 79W, LKC (WGC). Greater Yellowlegs: 1 Mar-5 May (2) DYC, 10-16 Mar (1-30) LKC (WGC); 20 Mar (100) LKC (MAG, EKW); 22 Mar -13 May (3-150) ESL (MGW, JEW, MLG, GBB, CHB, VBR, DPB); 30 Mar (30) SE Bells (MAG); 5 May (2) DYC (WGC). Lesser Yellowlegs: 1 Mar (1) DYC, 2 Mar -8 May (3-54) LKC (WGC); 20 Mar (135) LKC (MAG, EKW); 22 Mar-19 May (9-82) ESL (MGW, JEW, MLG, GBB, CHB, VBR, DPB); 30 Mar (24) SW Bells (MAG); 5 May (54) LKC (WGC). Solitary Sandpiper: 1 Apr-13 May (1-54) ESL (CHB, VBR, MGW, GBB, MLG, Van Harris); 5 May (15) SFP (TOS). Willet: 14 Apr (1)

Pickwick State Park, HDC (DJS, RRS), early; 25 Apr/8 May (16/7) Is 13 (WGC). Upland Sandpiper: 19 Apr (3) MDC (JBC); 21 Apr (3) ESL (MGW, JEW). Least Sandpiper: 21 Mar (9) DYC, 24 Mar (6) LKC (WGC). Pectoral Sandpiper: 13/24 Mar (50/125) LKC, 21/28 Mar (62/13) DYC (WGC). White-rumped Sandpiper: 28 Apr/27 May (3/42) ESL (MLG); 5/6 May (6) ESL (TOS). Dunlin: 5/6 May (2) ESL (TOS). Stilt Sandpiper: 26/29 Apr (1/10) ESL (MGW, JEW, GBB). Dowitcher sp: 29 Apr/8 May (3/45) Hwy 79 West LKC, 5/8 May (5/2) DYC (WGC). Long-billed Dowitcher: 28/29 Apr (15) ESL (GBB, MLG). Common Snipe: 2-24 Mar (12-49) DYC, 23/24 Mar (14/30) LKC (WGC); 22 Mar-29 Apr (2-90+) ESL (VBR, CHB, MGW, JEW, GBB, DPB); 30 Mar (30) HWR, HYC, (47) SE Bells (MAG); 29 Apr (63) ESL (GBB). Wilson's Phalarope: 24 May (1) ESL (Richard Whittington), early SBC and west Tennessee; 12/13 May (12/3) ESL (TOS); 13 May (1) LKC (WGC). Bonaparte's Gull: 5-23 Mar (10) OBC, 10-16 Mar (13-17) LKC (WGC); 20 Mar (75) REL, OBC (MAG, EKW); 13 May (1) HWR, HYC (RPF). Caspian Tern: 5 May (1) Is 13 (WGC). Forster's Tern: 8 May (6) Is 13 (WGC); 27 May (4) ESL (MLG). Common Tern: 22 Apr (3) HWR (JBC, JES). Black Tern: 12/27 May (1/19) ESL (MLG).

Cuckoo-Shrike: Black-billed Cuckoo: 27 May (1) 7 mi NNW of LaGrange, FYC (BBC, LCC). Barn Owl: 26 May (nest, fledged yg) WEC (RPF, Sam Tucker). Great Horned Owl: Jan-Mar (pair, 2 yg) Iris Hill (JAF, SCF). Common Nighthawk: 1 Apr (1) Jackson (AH, HSH), early; 19 Apr (1) MDC (JBC); 4 May (1) DYC (WGC). Red-headed Woodpecker: 8 Apr (39) SFP (DDP); 29 Apr (37) SFP (MTOS). Willow Flycatcher: 13 May (1) ESL (MLG); 26 May (1) N of Greenfield, WEC (VBR, NMS, CHB). Least Flycatcher: 6 May (1) HWR, HYC (DPB); 12/13 May (1) ESL (MLG). Tree Swallow: 26 Apr (1 pr) nesting in snag Is 21, DYC, 28 Apr (10 showed interest in two dead snags, return trip found one pair nesting) Phillipy, 30 Apr (small colony in slough apparently nesting) TIP (WGC); 16 May (11) HWR, HYC (JBC, LVC). Bank Swallow: 5/13 May (6/7) ESL (MLG); 23 May (80+) Chickasaw Bluff No. 1, extension at 300 yards S of TN 87 at Fulton, LDC (BBC, LCC). Cliff Swallow: 12 May (6) ESL (MLG). Fish Crow: 17 Mar (5) MEM (VBR), 21 Mar (150+) Heloise, 25 Mar (25) Moss Island (EKW); 27 Mar (9) DYC (WGC). Carolina Wren: SW counties and Memphis area, more common than ever (BBC, LCC). Bewick's Wren: 5 May (1) ESL (MLG). House Wren: 8 Apr (1) SFP (DDP). Blue-gray Gnatcatcher: 16 Apr (2 nests almost comlete) REL, OBC (WGC). American Pipit: 23 Mar (17) REL, LKC (WGC). CEDAR WAXWING: 28 May (nest building) Crockett Bottoms, OBC (CPN, TDP, George McKinney). Loggerhead Shrike: 3 May (1) NE of LaGrange, 29 May (3) SE of Saulsbury (1) S of Grand Junction, FYC (BBC, LCC).

Vireo-Siskin: Warbling Vireo: 23 May (2) LDC (BBC, LCC). Blue-winged Warbler: 20 Apr (1) MDC (LVC, JBC); 22 Apr (2) PEF (MGW, JEW); 24/27 Apr (1) PEF (VBR); 29 Apr (1) SFP (MTOS); 29 Apr (1) MEM (SNM). Golden-winged Warbler: 5 May (1) SFP (GRM); 10 May (1) PEF (VBR). BREWSTER'S WARBLER: 9 May (1) Jackson, MDC (AH, HSH), good ph documentation. Tennessee Warbler: 25 May (1) MEM (BHW), late. Cape May Warbler: 5 May (2) SFP (JMC). Yellow-rumped Warbler: 17 May (1) PEF (RWP), late. Blackpoll: 8 May (3) PEF (VBR); 8 May (1) GBC (MAG); 12 May (1) Big Cypress Tree Natural Area (RPF, MAG, SDL, Sam Tucker); 28 May (1) Crockett Bottoms, OBC (CPN, TDP, George McKinney), late. Swainson's Warbler: 3 May (1) Wolf River, S of

LaGrange (BBC, LCC). Northern Waterthrush: 22 Apr (1) SFP (DDP); 24 Apr (1) PEF (VBR); 5 May (2) SFP (JMC); 13 May (1) ESL (MLG); 12 May (1) Big Cypress Tree State Natural Area (RPF, MAG, SDL, Sam Tucker). Mourning Warbler: 15 Apr (1) SFP (DDP), early. Wilson's Warbler: 22 Apr (1) SFP (DDP), early. Rose-breasted Grosbeak: 9 Apr (1) MEM (JEW). Painted Bunting: 29 Apr (2) MEM (GBB); 5/6 May (2) ESL (TOS). American Tree Sparrow: 18 Mar (1) Walnut Log, OBC (MLG). Vesper Sparrow: 12 Apr (3) PEF (RWP). Lincoln Sparrow: 7 Mar (1 b) Coffey Grounds (BBC); 17 Mar (1) PEF (MGW, JEW); 5 May (6) ESL (MLG); 13 May (1) DYC (WGC). Grasshopper Sparrow: 23 Apr (2) ESL (MGW, JEW); 29 Apr (1) ESL (GBB); 5/6 May (6) ESL (TOS); 26 May (1) north of Greenfield, WEC (CHB, VBR, NMS); 26 May (2) WEC (MAG, SDL). White-crowned Sparrow: 12/13 May (3) DYC (WGC); 15/16 May (7/2) GBC (MAG). Bobolink: 29 Apr (2 m) DYC, 30 Apr-8 May (7 m/30 m) LKC (WGC); 5/6 May (4/35) ESL (TOS). Western Meadowlark: 18 Mar (1) Tiptonville, LKC (MLG). House Finch: 13 May (2) Brownsville, HYC (RPF). Pine Siskin: 4/20 Apr (5) MDC (LVC, JBC, AH, HSH); 15 Apr (5) SFP (DDP); 18 Apr (1) SFP (CHB, HBD, VBR, NMS); 29 Apr (6) SFP (MTOS); 3 May (2) GBC (MAG).

Locations: BRF-Britton Ford, Tennessee NWR, Henry Co.; DYC-Dyer Co.; ESL-Ensley Sewage Lagoons; HDC-Hardin Co.; HWR-Hatchie Wildlife Refuge, Haywood Co.; HYC-Haywood Co.; LDC-Lauderdale Co.; LKC-Lake Co.; MDC-Madison Co.; MEM-Memphis; PEF-Penal Farm, Shelby Co.; PAP-Pace Point, Benton Co.; OBC-Obion Co; REL-Reeelfoot Lake, Lake and Obion Cos.; SBC-Shelby Co.; SFP-Shelby Forest State Park; TWMA-Tigrett Wildlife Management Area, Dyer Co.; WEC-Weakly Co.

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HIGHLAND RIM AND BASIN REGION - Dry weather characterized the spring season, with rainfall totals for the period 5.19 inches below normal in Nashville. April was especially dry, only 1.6 inches were recorded (2.87 inches below normal). Temperatures in Nashville were above normal in March and April, but slightly below normal in May.

The migration this season was unremarkable, no major flights were reported. However, an unprecedented number of apparently migrating Swainson's Warblers was reported from Nashville and Coffee County, as well as a possible nesting bird in Cheatham Co. A Scissor-tailed Flycatcher was recorded in Coffee Co. for the second consecutive Spring period. Nashville logged its first Spring record for western Kingbird during the spring count. A Cinnamon Teal was observed at Cross Creeks National Wildlife Refuge.

Cormorant-Merganser: Double-crested Cormorant: 25 Mar (11) WDR, FKC (DLD), ers; 11 May (4) PPL, DVC (NTOS, SBC). American Bittern: 11 May (1) Shelby Bottoms, DVC (NTOS, SBC), only report. Great Egret: 8 Apr-29 May (1) AEDC, CFC (DLD), ers; 11 Apr (7) MOP, MUC (OBL), max; 11 May (3) GSP, SUC (NTOS, SBC), lrs. Snowy Egret: 11 Apr (1) Cumberland River at Clees Ferry, DVC (Mason Sinclair), only report. Little Blue Heron: 13 Apr (1) Hillsboro, CFC (ELR), only report. Cattle Egret: 15 Apr (1) Cutoff Rd. east of Powells Chapel Road, RUC (RVM), ers; 23 Apr (1) Shelby Bottoms, DVC (MSH), lrs. Black-crowned Night Heron: 11 Apr (109) Cumberland R between Briley Pkwy and OHL

Dam (Mason Sinclair), max. Tundra Swan: 18 Mar (4) Mason's Lake, PUC (JWW); 2 Apr (2) Mason's Lake, PUC (JWW), lrs. CINNAMON TEAL: 12 Apr (1) CCNWR, SWC (WJC). Ring-necked Duck: 11 May (1) OHL (NTOS, SBC), lrs. Lesser Scaup: 11 May (1) OHL (NTOS, SBC), lrs. Red-breasted Merganser: 11 May (1) OHL (NTOS, SBC), lrs.

Vulture-Crane: Black Vulture: 11 May (50) Fall Creek, WLC (DLD), max. Osprey: 28 Mar (1) Harpeth River, CHC (Knox Martin), only report. Bald Eagle: 8 Mar (2 ad) Pardues Pond, CHC (WJC); 29 Mar (1 im) Pardues Pond, CHC (WJC). Merlin: 19 Mar (1) Siegel Road, RUC (TJW), ers; 11 May (1) CHC (NTOS, SBC), lrs. Peregrine Falcon: 21 Mar-19 Apr (1) downtown Nashville, DVC (Mary A. Zimmerman), ers, this bird has been present in this area since Apr 1990; 8 Apr (1 ad) Loretto, Lawrence Co. (DJS); 11 May (1) DVC (DFV), lrs. Wild Turkey: 28 Apr (1) WDR, FKC (Annie Hartman). Sandhill Crane: 1 Mar (70) BAH, PUC (RWS), max; 3 Mar (40) Hollan Pond, FKC (DLD, RWL); 4 Mar (60) Millers Crossroads, CFC (FNM); 5 Mar (30) Manchester, CFC (DLD), lrs.

Plover-Owl: Lesser Golden Plover: 7 Apr (3) Hillsboro, CFC (DLD), only report. Willet: 28 Apr (8) WDR, FKC (DLD), ers; 30 Apr (10) near St. Bethlehem , Montgomery Co. (DHS), lrs and max. Western Sandpiper: 12 Apr (1) Hillsboro, CFC (DLD, RWL, QNS), only report. Stilt Sandpiper: 10 May (1) Todds Lake, RUC (TJW, David McCarrol), only report. Short-billed Dowitcher: 17 May (1) Todds Lake, RUC (TJW, David McCarrol), only report. Bonaparte's Gull: 11 May (1) GSP, SUC (NTOS, SBC); 11 May (3) PPL, lrs. Forster's Tern: 15 Mar (3) Normandy Res. (MDH), ers; 19 May (4) OHL, Wilson Co (RVM, Melissa A. Turrentine, Roy Turrentine), lrs. Black-billed Cuckoo: 1 May (2) Pennington Bend, DVC (WJC), ers and max; 5 May (1) BAH, PUC (RWS), lrs. Common Barn Owl: 18 May (4 nestlings) Zion Community, MUC (GRM), these birds were discovered in a cavity in a tree blowdown in a storm; 2 of the birds died and 2 survived to be banded and released.

Sapsucker-Vireo: Yellow-bellied Sapsucker: 28 Apr (1) Manchester, CFC (ARN), lrs. Olive-sided Flycatcher: 11 May (1) RDL (NTOS, SBC), only report. Willow Flycatcher: 11 May (3) CHC (NTOS, SBC), max; 11 May (1) Metro Center, DVC (NTOS, SBC). Yellow-bellied Flycatcher: 22 May (1 b) Columbia, MUC (GRM), only report. SCISSOR-TAILED FLYCATCHER: 30 May (1) Bean's Creek, CFC (DLD), only report. WESTERN KINGBIRD: 12 May (1) Pasquo, DVC (Richard Conners), this constitutes the first spring record of this species in the Nashville area. Bewick's Wren: 22 Apr (1) Stones River Country Club, RUC (TJW), ers; 24 May (1) Simmon's Bluff Road, WLC (TJW). Winter Wren: 18 Apr (1) BAH (RWS), lrs. Red-breasted Nuthatch: 24 Mar (1) LH, DVC (JCA), only report. Brown Creeper: 5 May (1) Boxwell Boy Scout Reservation, WLC (June Gelpi), lrs. Water Pipit; 26 Mar (17) Tullahoma, CFC (MDH), ers; 27 Mar (50) Hillsboro, CFC (DLD), max. SOLITARY VIREO: 26 Mar (1) Oaklands, RUC (TJW), earliest arrival date ever recorded in the Nashville area. Philadelphia Vireo: 11 May (6) RDL (NTOS, SBC), max; 7 May (1) Dunbar Cave S.P. MTC (AHH); 9 May (3) RDL (JCA), et al.), lrs.

Warblers: Blue-winged Warbler: 16 Apr (1) Sullivan Ridge, DVC (WJC), ers. Tennessee Warbler: 23 Apr (1) LH (JCA), ers; 17 May (1) CLA (AHH), lrs. Golden-winged Warbler: 23 Apr (1) Sullivan's Ridge, DVC (WJC), ers. Orange-

crowned Warbler: 23 Apr (1) LH (JCA); 25 Apr (1) RDL (WJC). Nashville Warbler: 22 Apr (1) WP (WJC), ers; 4 May (1) CLA (AHH), lrs. Northern Parula: 15 Apr (1) CLA (AHH), ers. Yellow Warbler: 17 Apr (1) RDL (WJC), ers. Chestnut-sided Warbler: 24 Apr (1) CLA (AHH), ers. Magnolia Warbler: 30 Apr (1) LH (JCA), ers; 18 May (1) LH (JCA), lrs. Cape May Warbler: 29 Apr (1) Cookeville, PUC (JWW), ers. Black-throated Blue Warbler: 9 May (1) BAH (RWS), only report. Yellow-rumped Warbler: 12 May (1) RDL (JCA, et al.), lrs. Black-throated Green Warbler: 31 Mar (1) RDL (WJC). Blackburnian Warbler: 30 Apr (1) Dunbar Cave S. P. MTC (AHH), ers. Yellow-throated Warbler: 4 Apr (1) CLA (AHH), ers. Bay-breasted Warbler: 30 Apr (1) BAH (RWS), ers. Cerulean Warbler: 21 Apr (1) Sullivan Ridge (WJC), ers. Prothonotary Warbler: 15 Apr (1) CLA (AHH), ers. SWAINSON'S WARBLER: 25 Apr (1) Ashland City Marsh, CHC (TJW), ers; 2 May (1) RDL (WJC); 17 May (1) Bradley Creek, CFC (DLD, RWL, ELR), lrs, this species was recorded more frequently this season than ever before, observers are encouraged to watch for this species and be aware that Swainson's Warblers have nested in the region. Louisiana Waterthrush: 20 Mar (1) Basin Spring, DVC (ATT), ers. Kentucky Warbler: 21 Apr (1) Sullivan Ridge (WJC), ers. Connecticut Warbler: 22 Apr (1) Tullahoma, CFC (MDH), ers; 17-18 May (1) CLA (AHH); 19 May (1) BAH (RWS), lrs. Mourning Warbler: 13 May (1) Columbia, MUC (WNJ), ers; 15 May (1) LH (JCA); 15 May (1) CLA (AHH); 24 May (1) WP (DFV), lrs. Common Yellowthroat: 16 Apr (1) CCNWR, SWC (AHH), ers. Hooded Warbler: 16 Apr (1) Sullivan's Ridge (WJC), ers. Wilson's Warbler: 3 May (1 b) Columbia, MUC (GRM), ers; 15-23 May (1) LH (JCA), lrs. Canada Warbler: 30 Apr (1) BAH (RWS), ers; 14-23 May (1) LH (JCA), lrs. Yellow-breasted Chat: 24 Apr (1) LH (JCA), ers.

Dickcissel-Siskin: Dickcissel: 7 Apr (1) CLA (Ellen J. Walker), ers; 7 May (2) Columbia, MUC (MDH). Chipping Sparrow: 10 Mar (1) MUC (OBL), ers. Vesper Sparrow: 31 Mar (4) Steel Stock Rd., MTC (AHH), ers; 7 May (1) Stoneybrook Golf Course, MUC, (WNJ), lrs. Lark Sparrow: 11 May (1) Simmons Bluff Rd. WLC (RVM, Melvin R. McMillan), only report. Grasshopper Sparrow: 28 Apr (1) AEDC (DLD), ers; 1 May (1) Dudley Rd. MTC (AHH); 12 May (1) Horseshoe Bend, DVC (DFV). Lincoln's Sparrow: 1 May (1) Pennington Bend, DVC (WJC), ers; 12 May (2) Horseshoe Bend, DVC (DFV), lrs. Bobolink: 1 May (66) MTC (AHH), ers and max; 5 May (50) Miller's Crossroads, CFC (FNM); 12 May (27) Horseshoe Bend, DVC (DFV), lrs. Pine Siskin: 25 May (1) BAH (RWS), lrs.

Locations: AEDC-Arnold Engineering and Development Center, Coffee Co.; BAH-Barnes Hollow, Putnam Co.; CCNWR-Cross Creeks National Wildlife Refuge; CFC-Coffee Co.; CHC-Cheatham Co.; CLA-Clarksville, Montgomery Co.; DVC-Davidson Co.; FKC-Franklin Co.; GSP-Gallatin Steam Plant, Sumner Co.; LH-Love Hill, Davidson Co.; MOP-Monsanto Ponds, Maury Co.; MUC-Maury Co.; OHL-Old Hickory Lake; PPL-Percy Priest Lake; PUC-Putnam Co.; RDL-Radnor Lake, Davidson Co.; RUC-Rutherford Co.; SUC-Sumner Co.; SWC-Stewart Co.; WDR-Woods Reservoir; WLC-Wilson Co.; WP-Warner Parks, Davidson Co.

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EASTERN RIDGE AND VALLEY REGION - Basically, it was a wet spring cool temperatures occurred early in the season, but returned to normal later. The second week of March was unseasonably warm, but the rest of the month and the first half of April were cooler than usual. The latter half of April through May saw average temperatures. Precipitation in March ranged from well above normal (9.5 in. at Chattanooga is 3.2 in. high) to near normal (4.0 in. at Johnson City), while that for April was 1-2 in. below normal regionwide and May rainfall was 2-3 in. above normal regionwide. Johnson City received a light snow on 19 March and saw its last frost on 18 April.

Birding was good this spring. Most regular migrants were on schedule, with few over-eager or tardy individuals. Several rare and uncommon birds were observed. Ducks and shorebirds were generally reported as somewhat scarce, but there were some good finds among them. Among passerines, warblers staged a good flight in the Knoxville (33 species on spring count 29 April) and Johnson City areas.

The autumn hawk migration is well known, but the returning flight in spring seems to go unnoticed. It may be less dramatic, but should be deserving of our attention. In addition to reports in the text below, a small northward movement was noted by Randy Stringer in the Chattanooga area on 27 March (5 Red-tailed Hawks), 28 March (1 Northern Harrier, 1 Sharp-shinned Hawk and 8 Red-tailed Hawks) and 2 April (3 Sharp-shinned, 1 Cooper's, 2 Red-tailed, and 1 American Kestrel).

Loon-Ibis: Red-throated Loon: 26 Mar (1) CHL (RCS). Common Loon: 6 Apr (44) BOL (RLK), max; 27 Apr (1) AUS (RLK), lrs. Horned Grebe: 6 Apr (11) BOL (RLK), max. AMERICAN WHITE PELICAN: 23 Mar-3 Apr (9) HRA, Meigs Co. portion (Carl W. Campbell, et al.); 8 Apr (8) Watts Bar Lake, Roane Co. portion (Dick Hurd); 11 Apr (5) FLL (Marcia L. Davis); probably the same birds moving up the Tennessee River system. Double-crested Cormorant: 4-7 Apr (8-12) Nick-ajack Lake, Marion Co. (AMJ, EMR, RJH); 6/17 Apr (5/13) BOL (RLK/ Tom McNeil, Stan Strickland); regular through Apr (max 55 on the 18th) FLL (JMC, BRC); 18 Apr (3) KPT (FJA); 18-24 Apr/7-12 May (1-2/5-2) AUS (RLK); 25 May (1) BOL (BLC, GWS); good showing. LEAST BITTERN: 29 Apr (1) AUS (RLK), rare, especially in the spring. Great Blue Heron: 9-11 nests BLV (BGM); 3 nests Bledsoe State Forest, Bledsoe Co. (Robert F. Campbell); 2 new colonies on FLL (the first there)-1 in Blount Co. and the other (5+ nests) on Looney Island, KNC (Barbara Finney, Steve and Rebecca Satterfield, Lou Fuller et al.), the latter is the furthest upstream site known; this species continues to increase in numbers and expand its range. Great Egret: 23/27 Mar (1) HRA (AMJ, EMR); 3 Apr (1) AUS, the earliest ever there by 7 days; 6 Apr (3) SAB (KHD, LHD); 7 Apr (3) Clear Creek Reservoir, Bristol, Virginia (JWC); 8 Apr (2) HRA (DCC); 9 Apr (pair in Great Blue Heron colony) Harrison Bay, CHL (CPN), not known if they nested, which would be the first in east Tennessee; 11 Apr (5) FLL (Holly Overton); 18 Apr (1) AUS (RLK); 27 Apr (1) Cherokee Lake, Grainger Co. (DCC); 2 May (1) BLV (BGM); 31 May (1) HRA (AMJ, EMR). Snowy Egret: 31 May (1) HRA (AMJ, EMR). Cattle Egret: 7 Apr (1) KNC (DCC); 17-18 Apr (1) AUS (BLC, RLK); 1 May (3) southern WGC (FJA); 3 May (1) BOL (BLC); 11 May (1) SAB (KHD, LHD). Green-backed Heron: 28 Mar (1) AUS (BLC), ers. Black-crowned Night Heron: 3 Apr (2) Nolichucky Waterfowl Refuge, GNC (Jim Holt); 27 Apr-1 May (2) AUS (RLK, JWB); a small colony (10+ nests) on an island in the Holston River at KPT (Daniel

J. Nieves). Yellow-crowned Night Heron: 31 Mar (1) BLV (BGM), ers at nesting site; 21 Apr (2) GNC (Phine Britton); 31 May (1) HRA (AMJ, EMR). GLOSSY IBIS: 26 Apr (1 ad, breeding plumage) AUS (RLK et al.), 3rd local record.

Waterfowl: Greater White-fronted Goose: 31 Mar (1) HRA (RJH), late. Snow Goose: 3 Mar (14 white) migrating over CHA (KHD, AMJ); 27 March (1 blue) HRA (AMJ, EMR). Blue-winged Teal: 6 Apr (50) BOL (RLK), max. Northern Shoveler: 6 Apr (20) BOL (RLK), max. American Wigeon: 12 May (2) KSP (KHD, LHD); 13 May (1) Douglas Lake, Jefferson Co. (ARH, RDH), lrs. Canvasback: 10 Mar (22) CHL (KHD, LHD, James D. Rowell, Jr.). Greater Scaup: 11 Mar (280) CHL (KHD, LHD), max. Lesser Scaup: 6 Apr (423) BOL (RLK), large number there, max. Oldsquaw: 29 Mar (4) BOL (RLK). White-winged Scoter: 26 Mar (1) CHL (RCS); 29 Mar (5) BOL (RLK). Surf Scoter: 6 Apr (1) BOL (RLK). Hooded Merganser: 22 May (1) KSP (ARH, RDH, Carol and Gene Coleman),late or nesting? Red-breasted Merganser: 6 Apr (57/88) BOL/Cherokee Lake, Grainger Co. (RLK/DCC), max.

Osprey-Crane: Osprey: 11 Mar (1) AUS (JWB), very early there. Bald Eagle: 19 May (1 im) DOD (RDH, ARH). Northern Harrier: 14, 16 Apr (1) WGC (RLK, BLC), lrs. Broad-winged Hawk: 7 Mar (2) BLV (BGM), ers; 23 Apr (42 in 1 kettle) Cleveland airport, Bradley Co. (RLK). Golden Eagle: 14 Apr (1 ad, 1 im) near JNC (RLK), late. Merlin: 1 Apr (1 f) AUS (RLK). Peregrine Falcon: 11 Mar (1) AUS (JWB); 28 Mar (1/1) CHA/SAB (RJH/RCS). Virginia Rail: 26-29 May (1) AUS (BLC), late or possibly nesting. Sora: 21 Mar (1) Jonesborough, WGC (JWB); 4 Apr (1) BLV (AMJ, EMR); 16 Apr/7-9 May (1/1) AUS (RLK,/BLC, RLK). American Coot: 27 May (1) BOL (JWC), lrs. Sandhill Crane: the migration through the CHA area extended from 11 Feb-10 Mar, with a late individual on 1 Apr, "peak numbers reached 1000-1500 on 4 Mar, most roosted on Hiwassee Island, Meigs Co." (fide KHD); 21 Apr (1) Mosheim, GNC (Linda Northrop, Daniel J. Nieves), late and east of usual occurrence.

Plover-Woodpecker: Lesser Golden Plover: 29 Mar (1) Eagle Bend Fish Hatchery, Anderson Co. (JMC, BRC); 31 Mar (1) LST (RLK); 5-6 Apr (2) AUS (RLK et al.); 14-15 Apr (1) BLV (RJH). Ruddy Turnstone: 25 May (1) KSP (RJH). Sanderling: 18/22 May (2/7) KSP (JRW, Dollyann Myers/ Bob Collier). White-rumped Sandpiper: 25 May (6) KSP (RJH). American Woodcock: 3 Mar (2) Moccasin Bend, CHA (RJH et al.); 4 Mar (2) AUS (JWB); 6 Mar (2-3) East Brainerd, CHA (Robin A. Rudd); 17 Mar (nest with 3 eggs) Snooper's Rock, Prentice Cooper State Forest, Marion Co. (Robert F. Campbell). Bonaparte's Gull: good numbers on many major bodies of water throughout the region, mostly in Apr; 6 Apr (225) BOL (RLK), max; 22 May (1) KSP (Bob Collier), lrs. Ring-billed Gull: 3 Jun (1) AUS (RLK), lrs. Herring Gull: 6 Apr (11) BOL (RLK), max. Caspian Tern: 12 Apr (1) FLL (Steve and Rebecca Satterfield, Chris Butler); 6/25 May (3/2) KSP (RLK, JWB, Linda Northrop/ RJH). Forster's Tern: 6 Apr (1) BOL (RLK); 16/21 Apr (1/1) AUS (RLK); 21 Apr (2) KPT (Stan Strickland); 4 May (15) Cherokee Lake, Grainger Co. (DCC). Black-billed Cuckoo: 27 May (1) Blountville, SLC (RLK), only report. Barn Owl: 4 Apr/9 May (1 dead yg about 3-4 days old/ ad feeding yg) JNC (Dan Huffine/RLK); Mar-May/early Jun (pair/nest with eggs) Gray, WGC (Dan Huffine); 15 May (nest with 6-8 yg) Sulphur Springs, WGC (Ken Ripley, RLK); 17 May (nest with 5 eggs) LST (Ken Ripley, RLK).

Red-headed Woodpecker: 3 May-EOP (2) LST (BLC et al.); 7 May (1 migrant) AUS (RLK); 9 May (1) Bowmantown, WGC (BLC, JWB, RLK); 15 May (1) near Jonesborough, WGC (RLK); 25 May (2) GNC (JoAnne Routledge).

Flycatcher-Shrike: Olive-sided Flycatcher: 21 May (1) Jefferson City (Howard Chitwood). Acadian Flycatcher: 3 Mar (2 singing birds) Fall Creek Falls S.P., Van Buren Co. (*MGW, Susan McWhirter et al.), more than a month early. Least Flycatcher: 28 May (2) near Jellico, Campbell Co. (ARH, RDH), not found 2 Jun. Tree Swallow: pair nesting in nestbox AUS (RLK), 3rd nesting there. Cliff Swallow: nesting under 4 bridges on BOL (RLK, JWC). Red-breasted Nuthatch: 1 May (1) Sewanee, Franklin Co. (Jerry Ingles); 2 May (1) JNC (RLK); lrs of modest winter invasion. Brown-headed Nuthatch: 17 Mar (pair investigating nestbox) CHA (Lynn and Helen Sauls). Marsh Wren: 12 May (1) AUS (RLK). Blue-gray Gnatcatcher: 14 Apr (25+ flocking with Yellow-rumped Warblers) Bean Station, Hawkins Co. (RDH, ARH), unusual concentration, "possibly due to rainy weather". American Pipit: 29 Apr (18) U.T. Plant Sciences Farm, KNC (ARH), lrs. Loggerhead Shrike: "good numbers of reports from KNC, Grainger, Seveir, Hawkins, Loudon, Claiborne, and Rhea Cos." (RDH, ARH, Richard Clark, CPN, George W. McKinney); 24 May (2 ad with 4 yg) SAB (Paul Cole); 6 sites in WGC and SLC, including 31 May (2 ad with 4 yg) BOL (RLK et al.); encouraging reports for this declining species, but should still bear close watching.

Vireo-Grosbeak: Yellow-throated Vireo: 30 Mar (1) CHA (RCS), ers. Warbling Vireo: 12 May-EOP (pair) LST (RLK, BLC); 15 May (2 singing m) Sulphur Springs, WGC (RLK); 31 May (1) BOL (RLK); scarce in region. Philadelphia Vireo: 29 Apr (1) KNC spring count (fide CPN), only report. Orange-crowned Warbler: 26 Mar (1) CHL (RCS). Yellow-rumped Warbler: 25 May (3) Bristol, SLC (JWC), lrs. Connecticut Warbler: 19 May (1) CHA (RJH). Vesper Sparrow: several reports; 7 Apr (25) CHA (RJH), max; 25 Apr (1) AUS (RLK), lrs. SHARP-TAILED SPARROW: 12 May (1) AUS (RLK, JWB), first spring record in the JNC-Elizabethton area, 10th overall; very few spring sightings in the state. Swamp Sparrow: 12 May (2) AUS (RLK, JWB), lrs. White-throated Sparrow: 19 May (1) DOD (ARH, RDH), lrs. Bobolink: relatively few reports in the KNC and JNC areas (fide CPN and RLK). BREWER'S BLACKBIRD: 30 Mar (1 f) Tri-cities airport, SLC (BLC, SG, GWS, MD, CFW). Northern Oriole: 19 May ("pair with at least 2 yg in nest constructed of monofilament fishing line") near DOD (RDH, ARH), nest first observed on 15 Apr, could it have been built last year? Purple Finch: after being virtually absent all winter, there was a major movement into the JNC area from late Mar to late Apr, with 20-50 daily at feeders and in the woods (fide RLK); apparently no such occurrence elsewhere. Pine Siskin: common regionwide through Apr; record high of 214 on KNC spring count 29 Apr (fide CPN); lrs for GNC, JNC and Bristol in early May (m.ob.); 19 May (1) Signal Mountain, HLC (Jonnie Sue Lyons); present to EOP in Sewanee, Franklin Co. (Harry C. Yeatman); 27 May (1 fledged yg) Lookout Mountain, HLC (Ted Caldwell), first state breeding record, if accepted by the Breeding Bird Atlas Verification Committee, details should be published separately. Evening Grosbeak: 16 Mar/1 May (40/1) GNC (Herb and Cynthia Cragin), max and lrs there; 13-15 Apr (1) JNC (fide Lois Herndon), only report in the JNC area.

Locations: AUS-Austin Springs, Washington Co.; BLV-Brainerd Levee, Hamilton Co.; BOL-Boone Lake, Sullivan and Washington Cos.; CHA-Chattanooga; CHL-Chickamauga Lake, Hamilton Co. portion; DOD-Douglas Dam, Sevier Co.; FLL-Fort Loudoun Lake, Knox Co. portion;GNC-Greene Co.; HLC-Hamilton Co.; HRA-Hiwassee River Area, primarily Meigs Co., but also Bradley, McMinn, and Rhea Cos.; KNC-Knox Co.; KPT-Kingsport; KSP-Kingston Steam Plant, Roane Co.; JNC-Johnson City; LST-Limestone, Washington Co.; SAB-Savannah Bay, Hamilton Co.; SLC-Sullivan Co.; WGC-Washington Co.

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EASTERN MOUNTAIN REGION - Periods of cool weather in March and April seemed to delay the arrival of many migrants. Precipitation was about normal in March, April was below normal and May was almost 3 in. above normal. Watauga and South Holston Lakes reached full pool early. Almost continuous release of water at South Holston dam kept water in South Holston River deep and swift. Shorebirds were observed flying up and down the river, finding no places to land.

I was happy to receive records from some new contributors as well as records from some who had not contributed in a while. Keep up the good work.

Grebe-Turkey: Horned Grebe: 5 Mar (12) SHL (BLC). Great Egret: 8 Apr (1) Butler, JHC (JWB); 15 Apr (1) Stoney Creek, CRC (GOW). Yellow-crowned Night Heron: 30 Mar (2) ELI (RLK), ers, at usual nest site through period. Green-winged Teal: 24-25 Mar (1) WTR (CFW), only report. American Black Duck: 6 Mar (2) RIP (CFW), lrs. American Wigeon: 4 Apr (12) WTL (BLC), max. Ring-necked Duck: 4 Apr (18) WIL (RLK), max. Lesser Scaup: 4 Apr (2) WIL (RLK), lrs. SURF SCOTER: 4 Apr (1 ad m, 1 ad f) WIL (RLK et al.). Bufflehead: 12 May (1) WIL (GOW, RDL, CFW), lrs. Hooded Merganser: 6 Mar (5) RIP (CFW); 27 Mar-6 Apr (7) WTR (GOW et al.). Red-breasted Merganser: 24 Mar (20) Nolichucky R. UNC (FJA); 12 May (1) WTL (GOW, RDL, CFW). Northern Harrier: 5 May (1) RNM (GOW, BLC, MD, CFW, GWS), only report, late. Sharp-shinned Hawk: 4 reports from CRC and UNC. Cooper's Hawk: only 1 report, UNC. Red-shouldered Hawk: 4 Apr (1) WIL (BLC, SG); 14 May (1) RIP (RLK). Merlin: 12 May (1 f) WTR (RDL, GOW), late. Wild Turkey: 8 Apr (1) Simmerly Creek, CRC (TM); 9 Apr (1) Buffalo Mt., WAC (BLC).

Woodcock-Wren: American Woodcock: 5 Mar (1) CGP RNM (ABS). Bonaparte's Gull: 27 Mar (38) SHL (BLC). Ring-billed Gull: 12 May (2) WTL (GOW, RDL, CFW), lrs. Black-billed Cuckoo: 1/28 May (1/1) SHL (RPL). Northern Saw-whet Owl: 5 Mar (1, calling) CGP RNM (ABS), ers; 2 other CGP records; 19-20 May (3) GSMNP (JRW, Dollyann Myers). Chuck-wills-widow: 21 Apr (1) MLC (FJA), ers. Ruby-throated Hummingbird: 15 Apr (1) MLC (FJA), ers. Red-headed Woodpecker: 20 Mar-24 Apr (1) MLC (FJA). Yellow-bellied Sapsucker: 17 Apr (1) CRC (MD), lrs. Olive-sided Flycatcher: 2 May (1) Buffalo Valley Golf Course, UNC (JWB). Alder Flycatcher: 14 May (2) RNM (RLK), ers. Tree Swallow: 16 Mar (6) WTR (CFW), ers; 28 Apr-EOP SDV (JS, LAS, JWC), nest in nestbox, 5 eggs on 12 May. Northern Rough-winged Swallow: 12 May, nest along U.S. 421 near top of Holston Mtn., SUL (RPL). Cliff Swallow: 12 May (20+ active nests) SR44 bridge, South Holston River, SUL (RPL). Barn Swallow: 18 Mar (2) WTR (TM), ers. Common Raven: 5 Mar (6) RNM (RLK); 15 Mar-EOP (2)

SHL (RPL), seen regularly at 1700' elev.; 21 Apr (1) ERW (GOW). Red-breasted Nuthatch: numerous reports of 1-2 birds at all elevations through Apr. Brown Creeper: 14 May (1) in spruce-fir, RNM (RLK). Marsh Wren: 12 May (1) ERW (BLC, SG, GWS).

Thrush-Grosbeak: Swainson's Thrush: 20 May (1) SHL (RPL), lrs, b. Solitary Vireo: 14 Mar (1) Hoss Cove, WAC (FJA), ers, early record by 6 days. Yellow-throated Vireo: 20 Apr (1) SHL (RPL), ers. Philadelphia Vireo: 8 May (1) WIL (TM). Blue-winged Warbler: 25 May (1) Dry Creek, Buffalo Mtn., WAC (RLK), lrs, late. Golden-winged Warbler: 3 territorial males, Roan Mt. State Park, CRC (RLK). Tennessee Warbler: 24 May (1) SHL (RPL), lrs. Yellow-rumped Warbler: 14 May (1) RIP (RLK), lrs. Swainson's Warbler: 2 May-EOP (1) Hoss Cove, WAC (RLK); 14 May (1) RIP (RLK). Dickcissel: 12 May (1) SDV (JWC, JS, LAS). Vesper Sparrow: 6 Apr (25) Razor Farm, ELI (BLC, MD, GWS), large concentration; 29 Apr (2) SDV (JS); 19 May (1) Roger's Ridge, JHC (RLK), on breeding grounds. Savannah Sparrow: 8 Apr (2) SDV (JWC). White-crowned Sparrow: 6 May (1) SDV (JS), lrs. Bobolink: 6 May (1) SDV (JS). Rusty Blackbird: 8 Apr (107) SDV (JWC). Purple Finch: scarce through Mar, sizeable influx in Apr (10-30 daily); 4 May (6) SHL (RPL), lrs. Pine Siskin: 20-30 daily until departure; 11 May (10) SHL (RPL), lrs. Evening Grosbeak: 5 Mar (120) RNM (RLK); 8 Apr (60) Simmerly Creek, CRC (TM); 50-75 daily through 8 Apr SDV (JS); 16 Apr (2) SDV (JS), lrs.

Addendum: Whimbrel: 5 Aug 87 (1) RNM (ABS). Water Pipit: 12 Jun 87 (2) RNM (ABS). Magnolia Warbler: 17 May/20 Jun 89 (1, singing) Grassy Ridge, RNM (ABS). Snow Bunting: 18 Nov 88 (1) RNM (ABS).

Locations: CGP-Carver's Gap, Carter Co.; CRC-Carter Co.; ELI-Elizabethton; ERW-Erwin; GSMNP-Great Smoky Mountain National Park; JHC-Johnson Co.; MLC-Milligan College, Carter Co.; RIP-Ripshin Lake, Carter Co.; RNM-Roan Mtn, Carter Co.; SDV-Shady Valley, Johnson Co.; SHL-South Holston Lake area, Sullivan Co.; SUL-Sullivan Co.; WAC-Washington Co.; WIL-Wilbur Lake, Carter Co.; WTL-Watauga Lake, Carter Co.; WTR-Watauga River, Carter Co.; UNC-Unicoi Co.

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OBSERVERS:

FJA - Fred J. Alsop
CHB - Carolyn H. Bullock
GBB - Gil B. Beaver
BBC - Ben B. Coffey, Jr.
DCC - David C. Chaffin
JMC - James M. Campbell
LCC - Lula C. Coffey
RTC - Robert T. Casey
WJC - William J. Cowart
HBD - Helen B. Dinkelspeil
LHD - Lillian H. Dubke
JAF - Jim A. Ferguson
SCF - Sue C. Ferguson
MLG - Murray L. Gardner
SG - Sally Goodin
AHH - Anne H. Heilman
HSH - Helen S. Hight
MSH - Mark S. Hackney
RJH - R. John Henderson
WNJ - William N. Jernigan
JLL - Joe L. Levy
RDL - Richard D. Lura
RWL - Ruth W. Luckado
SLL - Selma L. Lewis
FNM - F. Nicky Medley
RVM - Ruth V. McMillan
ARN - Annie R. Norvell
DDP - Dick D. Preston
TDP - T. David Pitts
ELR - Erma L. Rogers
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GWS - Glen W. Swofford
JS - John Shumate, Jr.
NMS - Noreen M. Smith
RRS - Regina R. Simbeck
RWS - Richard W. Simmers, Jr
MJU - M. Jackie Utley
BHW - Barbara H. Wilson
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JRW - Jeff R. Wilson
MGW - Martha G. Waldron
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BLC - Brian L. Cross
JBC - Joyce B. Campion
JWC - J. Wallace Coffey
LVC - Larry V. Campion
WGC - William G. Criswell
DLD - Donald L. Davidson
KHD - Kenneth H. Dubke
MD - Martha Dillenbeck
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MAG - Mark A. Greene
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MDH - Marguerite D. Hernandez
RDH - Ron D. Hoff
AMJ - Albert M. Jenkins
RLK - Richard L. Knight
OBL - O. Bedford Lochridge
RPL - Richard P. Lewis
SDL - Selena D. Little
BGM - Barbara G. McMahan
GRM - George R. Mayfield, Jr.
TM - Tom McNeil
CPN - Charles P. Nicholson
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INSTRUCTIONS TO AUTHORS

The Migrant records observations and studies of birds in Tennessee and adjacent areas. Most articles are written by members of the Tennessee Ornithological Society.

SUBMISSIONS: The original and, if feasible, two copies of the manuscript should be sent to the Editor: T. David Pitts, Biology Department, University of Tennessee at Martin, Martin, TN 38238. Manuscripts that have been published in other journals should not be submitted.

MATERIAL: The subject matter should relate to some phase of Tennessee ornithology. It should be original, factual, concise, and scientifically accurate.

STYLE: Both articles and short notes are solicited; recent issues of *The Migrant* should be used as a guide in the preparation of manuscripts. Where more detail is needed, reference should be made to the *Style Manual for Biological Journals*; this book is available at many public libraries and from the American Institute of Biological Sciences, 1401 Wilson Boulevard, Arlington, VA 22209.

COPY: Manuscripts should be typed *double spaced* on 8.5 x 11" paper with adequate margins for editorial notations. Tables should be prepared on separate sheets with appropriate title and column headings. Photographs intended for reproduction should be sharp with good contrast on glossy white paper; black and white photographs will usually reproduce better than color photographs. Weights, measurements, and distances should be in metric units. Dates should be in "continental" form (e.g., 16 March 1968). Use the 24-hour clock (e.g., 0500 or 1900).

NOMENCLATURE: The common and scientific names of a species should be given the first time it is mentioned. The scientific name should be underlined. Names should follow the A.O.U. Check-list of North American Birds (1983 edition or subsequent supplements).

TITLE: The title should be concise, specific, and descriptive.

ABSTRACT: Manuscripts of five or more typed pages should include an abstract. The abstract should be less than 5% of the length of the manuscript. It should include a brief explanation of why the research was done, the major results, and why the results are important.

LITERATURE CITED: List all literature citations in a Literature Cited section at the end of the text. Text citations should include the author and year.

IDENTIFICATION: Manuscripts including reports of rare or unusual species or of species at atypical times will be reviewed by the TOS Certification Committee before publication in *The Migrant*. Verifying evidence should include: date, time, light and weather conditions, exact location, habitat, optical equipment, distance, behavior of bird, comparison with other similar species, characteristic markings, experience of observer, other observers verifying the identification, and reference works consulted.

REPRINTS: Reprints are available to authors on request. Billing to authors will be through the TOS Treasurer.

SEASON REPORTS: Observations that are to be considered for publication in The Season section should be mailed to the appropriate Regional Compiler. Consult a recent issue of *The Migrant* for the name and address of the compilers.

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BIRDS

The Migrant

A Quarterly Journal
Devoted To Tennessee Birds

75th Anniversary

Published by
The Tennessee
Ornithological
Society

THE MIGRANT

A QUARTERLY JOURNAL OF ORNITHOLOGY

FIRST ISSUE PUBLISHED IN JUNE 1930

PUBLISHED BY

THE TENNESSEE ORNITHOLOGICAL SOCIETY

Founded at Nashville, Tennessee on 7 October 1915
The T.O.S. is a non-profit, educational, scientific,
and conservation organization.

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Annual dues are $10.00 for an Active membership. Other categories of membership are: Student - $5.00; Family - $12.00; Library - $15.00; Sustaining - $20.00; Life - $200.00. Chapters may collect additional fees to cover local expenses. Dues, contributions, and bequests are deductible from Federal income and estate taxes. Back issues of *The Migrant* may be purchased from the Curator. Please correspond with the Treasurer for subscriptions, memberships, and changes of address.

Published quarterly (March, June, September, and December).
Printed by Tennessee Industrial Printing Services, Inc., 51 Miller Ave., Jackson, TN 38305.

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THE MIGRANT

December 1990
Volume 61, Number 4

Commemorating the

75th Anniversary

of the

Tennessee Ornithological Society

1915 — 1990

THE MIGRANT

Published by the Tennessee Ornithological Society,
to Record and Encourage the Study of Birds in Tennessee.
Issued in March, June, September, and December.

VOL. 61 December 1990 NO. 4

The Migrant, 61(4):82-83, 1990.

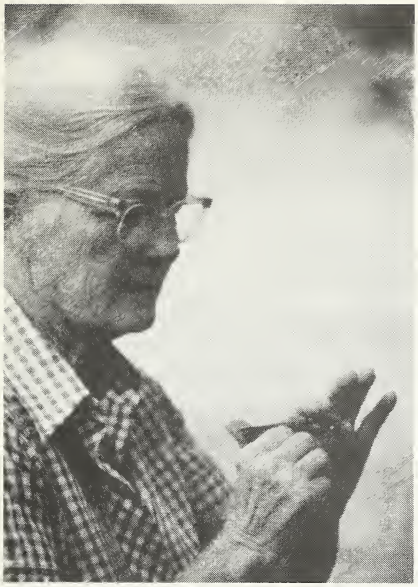
INTRODUCTION

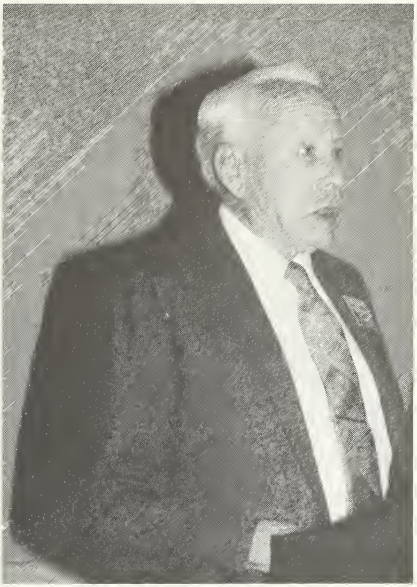
T. David Pitts

The Tennessee Ornithological Society (= TOS) celebrated its 50th anniversary with a special issue of *The Migrant* in June 1965. To commemorate the 75th anniversary another special issue has been prepared. In this issue some of the changes in birdlife in Tennessee since 1965 are summarized and representative activities of TOS members and chapters are described. Readers who are familiar with the traditional appearance and format of *The Migrant* will notice several changes in this issue. Most of these changes are temporary. The cover design was prepared by Ms. Teresa Bullock and donated to Mrs. Ben B. Coffey, Jr., who graciously allowed its use.

One of my responsibilities as editor is to insure that each manuscript adheres to certain standards of content and format. In this issue some of the normal guidelines have been modified, or even ignored, in an attempt to allow authors more personal contact with the readers. I believe that the lead article, an address made by Dr. James T. Tanner at the 75th anniversary meeting banquet, alone justifies the value of such a policy. One of my regrets upon completion of this special issue is that the coverage is not uniform. Certain groups, of both birds and TOS members, have not received the attention they deserve. This is due to a combination of factors such as limited space and lack of information. In spite of these limitations, I trust that future readers who did not experience the events of 1965-1990 which are described here or who did not know the individuals described here will be better able to appreciate the role of TOS and its contributions to ornithology in Tennessee.

I would like to express my appreciation to all who have assisted in the preparation of this issue. Also, I wish to gratefully acknowledge the special contributions made by Mr. and Mrs. Ben B. Coffey, Jr, Dr. Katherine Goodpasture, and Dr. James T. Tanner to TOS and to my personal career.





Upper left: Dr. Katherine A. Goodpasture

Upper right: Dr. James T. Tanner

Lower: Mr. and Mrs. Ben B. Coffey, Jr.

The Migrant, 61(4):84-89, 1990.

THE TENNESSEE ORNITHOLOGICAL SOCIETY AT 75, LOOKING BACK AND LOOKING FORWARD

James T. Tanner
417 Switzerland Drive, Knoxville, TN 37920

The Tennessee Ornithological Society (T.O.S.) began in a very informal way. Albert Ganier of Nashville, who described himself as a life-long student of birds, called on the editor of *The Morning Tennessean*, a man named Dixon Merritt. Ganier was attracted to Merritt because the latter occasionally wrote a kind of nature column for his newspaper. Each knew of others who were interested in birds, so the two called a meeting to see if there was interest in forming a "club for mutual pleasure and benefit." Five persons were present at a Nashville restaurant on 7 October 1915. They were: Albert Ganier, a civil engineer; Dixon Merritt, a newspaper editor; George Mayfield, Sr., a professor at Vanderbilt University; Alonzo Webb, an artist and teacher; and H. Y. Hughes, a judge in the civil courts. They agreed to organize, so two weeks later they met again, with a new member, George M. Curtis of the Vanderbilt College of Medicine. This second meeting was the formal beginning of the T.O.S., with six members.

I have personal recollections of three of the founders, and I think that you will be interested in the kind of persons they were. I begin with Albert Ganier, because in many ways he was the backbone of the T.O.S. Mr. Ganier was a quiet, dignified, but warm, gentleman. Professionally he was a civil engineer with the L. & N. Railroad, rising to a very responsible position in that company. His primary interest was in the birds of Tennessee, the birds living in the fields, woods, lakes and streams of this state. He made field trips to all corners of the state, and he described his observations in about 200 articles and notes. In his later years his field work was handicapped by deafness, but this did not diminish his enthusiasm. In the T.O.S. he held every important office at one time or another. "Held" is not the proper verb; he "worked in" every office. One of his most valuable contributions to the Society was being editor during the years of World War II. Then, because of travel restrictions and the absence of many members in the armed forces, field work was reduced, manuscripts for *The Migrant* were few and far between, annual meetings of the Society could not be held, and publishing was hindered by lack of paper. Despite all the difficulties, Mr. Ganier kept *The Migrant* going for a number of years. In 1966 He was honored as Tennessee's "Conservationist of the Year." Speaking personally, I had great respect for the man and was delighted to be a friend.

Let me turn next to the second man mentioned in this history, Dixon Merritt. He spent most of his life in the newspaper business, and at one time was editor of *The Nashville Tennessean*. This was a strenuous business, and after the organization of the Society he did not have much time for it until he retired to his farm near Lebanon. He occasionally wrote articles for *The Migrant*, and if you want to get a taste of his style I recommend you read an article in the June 1957 issue entitled "One Weewe He Phoebe", which is a sympathetic and entertaining account of a pair of Phoebes that nested under the eaves of his home. A regular custom at our annual meetings, while Dixon was alive, was to call upon him to recite a limerick

which he composed years ago, and which has become more famous than its author. It goes:

A wonderful bird is the pelican,
His bill can hold more than his bellican,
He can hold in his beak,
Enough food for a week,
Though I'm damned if I know how the hellican.

Dixon not only had wit, humor, and perception, he was also a man of action. At one of the first business meetings of the T.O.S. I ever attended, held under the trees at a park near Nashville, the question came up of a debt of about $50 that the Society had owed for some time. Dixon rose and said something about how this was ridiculous, and all we had to do was pass the hat and ten $5 bills would pay off the debt; in a few minutes it was accomplished. After his retirement, he led in organizing the Lebanon Chapter of the T.O.S. All in all, he was a delightful man to know.

The third of the founders that I came to know was George R. Mayfield, Sr. He was a professor of German at Vanderbilt University, usually rather formally dressed, which was probably why he was always referred to as "Professor" or "Doctor" Mayfield. But this remark is misleading, because he easily made friends with his bright personality and quick wit. The wit was illustrated when on a field trip he called out, "There is a Solitary Sandpiper." Someone spoke up, saying, "I say, it is a Spotted Sandpiper." Dr. Mayfield replied, "Of course, a solitary Spotted Sandpiper." He had a marvelously acute sense of hearing, and a great memory for the sounds of birds. This made him stand out on our group field trips. One of his hobbies was to listen to Mockingbirds and identify the kinds of birds that were mocked. He wrote an article on this for *The Migrant* (June 1934) listing about 50 species that Mockingbirds had imitated. He did the same for the Starling, identifying about 30 species imitated in the songs of that species (*The Migrant*, December 1942). Like the other founders, Dr. Mayfield was active in several fields. He wrote many articles for newspapers, usually on aspects of conservation. And he once served as chairman of the Tennessee Conservation Commission.

Of the six founders, I know that four of them had long lives, living to the ages of 80, 87, 90, and 93. This suggests that bird-study is a recipe for long life, a welcome thought to readers of *The Migrant*. But I really think that these persons were vigorous individuals, and because of their vigor they accomplished much in their lives and lived a long time.

To return to the history of the T.O.S.: The Society remained centered in Nashville for some time, but other chapters were gradually formed. The Knoxville Chapter started in 1923 under the leadership of H. P. Ijams, and the Memphis Chapter in 1929 under Ben Coffey. A good history of the growth of the Society was written by Mary Davant of Memphis and published in *The Migrant* of June 1965.

At the organization meeting of the T.O.S., in 1915, some individuals volunteered to find books on Tennessee birds or at least lists of birds of the state. Practically nothing was found, and that was accepted as a challenge to begin accumulating information. The first publication was "Bulletin No. 1, Tennessee Ornithological Society, February 6, 1916." This was a full page of print in both *The Nashville Tennessean* and *The Nashville American*. It was rediscovered as a newspaper

clipping in the archives of the T.O.S. when Katherine Goodpasture inventoried the file. The first real effort to survey the kinds of birds found in the state resulted in the publication in 1917 of "A Preliminary List of Birds of Tennessee," and this was revised in 1933 as "A Distributional List of the Birds of Tennessee." Both of these were written by Albert Ganier.

In 1930 the Society started its most lasting and valuable project, publication of *The Migrant*. Its first editor was George Woodring of Nashville. In its 61 years *The Migrant* has had only eight editors, an indication of both the devotion of these persons and of the rewarding nature of the work. In judging the contributions of *The Migrant*, it is easy to measure that a complete set occupies almost two feet of a bookshelf. I did not attempt to estimate how many articles and notes have been published, not even how many pages have been printed. It is also easy to perceive the importance of our journal. It is a focus for many of our activities and a magnet that brings participants together from across the state. Of course it is invaluable as a record of what we have learned about birds, and this record has earned *The Migrant* a reputation as one of the very best state ornithological journals.

A minor way to measure our progress in accumulating information is by the number of bird species known to have been present in Tennessee. In 1917 the list included 251 species; now it includes, by my count, 364 species.

Now to turn to some of the special projects which have been accomplished. The most long-lasting has been the series of "forays", as Albert Ganier named them. His first foray was to Reelfoot Lake in 1915 to find the kinds of birds there in the nesting season. Reelfoot was then an almost unknown area. The first forays were often accomplished just by Albert Ganier and some friend, often Alfred Clebsch of Clarksville. The most recent forays have included many participants following the same pattern: a trip around early June to some section of the state where the birds are little known, and intensive field work to find what is there. By now about 20 forays have been conducted in different regions of the states, but there still are gaps which we must fill in.

Other long continuing activities have been the Christmas Bird Counts, Spring Field Days, Fall Field Days, and the compilation of the observations to be published in *The Migrant*. The first of these counts reported in *The Migrant* was in 1930. Taken all together, these published reports contain an enormous amount of information about birds.

A project which lasted a relatively short time but had some very interesting results was the banding of Chimney Swifts. This was carried on at six locations in Tennessee. The interesting results were that five bands put on Swifts in Memphis by Ben Coffey and three in Nashville by J.B. Calhoun were recovered in 1944 in northern Peru; this was the first solid evidence of where Chimney Swifts spent the winter. Details on the banding and recovery are in the September 1944 issue of *The Migrant*.

A series of studies taught us much about the night-time migration of birds. The first of these was a cooperative project headed by an ornithologist at Louisiana State University in which several chapters of the T.O.S. cooperated. Volunteers at many locations watched the face of the full moon with a telescope, and counted the birds as they flew silhouetted against the moon. From the results we learned that night migrations were heaviest around midnight, and discovered something about the direction of flight and the effects of weather. Later on two kinds of accidents

to migrating birds provided new knowledge about the species of night migrants and their migratory seasons. The first accidents were at airport ceilometers in Knoxville and Nashville where, under certain weather conditions, nocturnal migrants were blinded by the intense light and flew into the ground by the hundreds. Fortunately this no longer happens because the nature of ceilometers has changed. The modern accidents result from birds striking very tall radio or television towers. Amelia Laskey and Katherine Goodpasture obtained much data by identifying birds killed by striking towers in the Nashville area.

In East Tennessee many hours have been spent watching the fall migration of hawks along the mountain ridges. These observations began about 1948, but were not coordinated until about 1954. Since then *The Migrant* has almost annually carried a summary of the fall hawk migration.

Now our most important project is the "Breeding Bird Atlas." It has been underway for over four years, organized and spurred on by Charles Nicholson. As the sports announcers say, it "has momentum", and we are looking forward to its completion. Like many projects, however, it may be harder to complete than it was to get started. So we must work for its completion, and if individuals have no time to do the field work, they can donate money in support.

This leads naturally to a related subject. In 1935 the four then surviving founders of the T.O.S. wrote:

"A project which the Society is looking forward to is the preparation of a comprehensive book on the birds of the State. It expects to sponsor nothing less than a thoroughly accurate, fully illustrated volume.... The Society is confident that such a work can be brought out in the not far distant future."

Fifty-five years have passed since that statement, so: Why do we not have a state bird book? The answer lies, perhaps surprisingly, in the success of the T.O.S. We have accumulated so much information about the birds of Tennessee that to organize and condense all that information has been too much of a challenge. For years we had assumed that "The Birds of Tennessee" would be written by Albert Ganier. He fully intended to do so, until about 1960 when he told me that he was then not up to the task.

So we are faced with a mass of information, perhaps more than has been recorded for the birds of any other state in this country. What we need now is a series of steps, each a pulling together of knowledge on one aspect of Tennessee bird life. Only in this way will the mass of information become organized and manageable. One major step in this direction was accomplished by John Robinson who compiled and digested most of the published records of each species in the state. This report has recently been published by the University of Tennessee Press. To complete some other steps was the motive for my writing three articles for *The Migrant*: an analysis of the Christmas Bird Counts (December 1985), an analysis of the Spring Bird Counts (December 1986), and an account of historical changes in the ranges of birds in Tennessee (September 1988).

I wish to suggest some other projects which should be done. Any comprehensive review of the birds of a state must depend heavily on accounts of the birds of local areas, written by persons who are thoroughly familiar with the area and its birds. At present we have only three good local accounts, one each for the Nashville area, for Shelby County, and for the Great Smoky Mountains. Three reports done several years ago now need revision; these pertain to Knox County, Greene County, and

Carter County. You can see that there are still many parts of the state for which we need local lists prepared by local authorities. Another subject which occurs to me is a modern summary of the data on hawk migration. There must be a wealth of information on waterfowl buried in the files of the Tennessee Valley Authority and the state and federal wildlife agencies. Another set of possibilities is the histories of species becoming rare, such as the Bachman's Sparrow and Barn Owl, because it is always harder to find data on declining populations than on any that are increasing.

The "Breeding Bird Atlas" will, of course, provide a solid base of information about the status of birds which nest in Tennessee. When it is done, we will know more about the summer residents than we do about the migrants and winter residents.

I think, furthermore, that now we need to start thinking about what kind of a state bird book we want. Of course it must be an accurate, scientifically thorough, and complete account. It also must appeal to many persons outside of the T.O.S., people who are not as interested in birds as are we. This is necessary for financial reasons. The kind of book we want cannot be published unless it has promise of a reasonably large sale. Even though scientific, it must not be dull. What about illustrations? Many state bird books, that for Massachusetts being the first, contain illustrations of all species from the state, usually depicting both the birds and their habitats. One reason for these pictures was that they were intended to aid in identification. But now we have several field guides which serve that purpose much better. On the other hand I think that a book without pictures would have a limited sale. This is one example of the decisions that need to be made. What I am emphasizing now is that we need to do some thinking about what kind of a book should be "The Birds of Tennessee."

I must conclude with a very different subject in which the T.O.S. has been involved since its beginning, and which may grow in importance in the future, the subject called "conservation." The first members of the Society, especially Albert Ganier and George Mayfield, felt that they needed to work for the legal protection of birds, to keep them from being shot. In Article I of the T.O.S. constitution is the statement that one purpose of the Society shall be "to stand for the passage and enforcement of wise and judicious laws for bird protection." Today the emphasis has shifted. We, as birdwatchers, know that birds are found only in certain habitats: thrushes and most warblers in the woods, rails and gallinules in the marshes, and so on. We know that some habitats are disappearing, and others are changing because of human actions. We know that, ultimately, if we are to conserve a species we must protect its habitat. Members of the T.O.S. have been active in preserving some good habitats; examples are Radnor Lake in Nashville, the Tennessee River Gorge near Chattanooga, House Mountain near Knoxville, Overton Park in Memphis, and the Monsanto ponds near Columbia. As in the early days, these accomplishments result, not by coordinated action of the whole Society, but largely by individual efforts of some members of the Society. To me this means that the T.O.S., by encouraging the study of birds, has fostered belief in the necessity of conservation. I think that, in the long run, this has been a more lasting benefit than if we had become a society oriented actively towards conservation. So let us keep on doing what we have been doing.

I will end by quoting again from an article written in 1935 by four of the founders:

> "Since the study of birds holds an inexhaustible supply of new facts to be learned, this Society and its members have much to look forward to in the years to come."

In short, we are not yet finished; there is still plenty to do.

The Migrant, 61(4):89-91, 1990.

NESTING BALD EAGLES IN TENNESSEE: 1965-1990

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During the last 25 years, the number of nesting Bald Eagles (*Haliaeetus leucocephalus*) in Tennessee has increased. This population growth has been primarily a result of three activities: (1) the banning of DDT from use in the United States in 1972; (2) the release (by hacking) of young eagles; and, (3) the enhancement of the fish food base by development of 34 man-made reservoirs totaling over 214,000 hectares (530,000 acres) during 1930-1980.

Bald Eagles once nested along the major river systems in Tennessee (Alsop 1979). Reelfoot National Wildlife Refuge records indicate that 14 "active nests" were at Reelfoot Lake as late as 1954 and 1955 (Crews 1980). Since some pairs of eagles may actively maintain more than one nest site, the actual number of nesting pairs at Reelfoot Lake in 1954 and 1955 is not known. However, in 1961 the last documented successful nesting for 22 years occurred in the state.

After DDT was banned from use in the United States, Tennessee's January Bald Eagle population increased from an annual average of 251 during 1979-1984 to 287 during 1985-1990. However, all of these eagles returned to nesting areas in southern Canada and the Great Lakes states where they had fledged. A hacking program was initiated in Tennessee in 1980 at Land-Between-the-Lakes (LBL) to accelerate the establishment of a nesting population.

The hacking technique assumed that raptors tend to return to nest in the general area of their maiden flights. Hacking was initiated at Cornell University (Sherrod and Cade 1978) in 1972 to reintroduce Peregrine Falcons (*Falco peregrinus*) in areas where pesticides and other factors had previously extirpated the populations. Hacking of Bald Eagles was initiated in 1976 in New York state, with one eagle returning to nest in 1980 about 135 km (85 miles) from the hack site (Nye 1980).

From 1980 through 1990, 146 young Bald Eagles were released at five hack sites in Tennessee (Table 1). Current proposals are for a total of 74 additional eagles to be released at three of these sites and at a new site during 1991-1993 (Table 1).

EVIDENCE OF THE RETURN OF HACKED EAGLES

In Tennessee: In 1990, 13 of Tennessee's 14 occupied Bald Eagle nests were within about 75 km (47 miles) of the two oldest hack sites, LBL and Reelfoot Lake. Included in these 13 were five of the six successful nests in the state. Five occupied nests were an average of 19 km (12 miles) from the Reelfoot hack site and eight occupied nests were an average of 43 km (27 miles) from the LBL hack site.

Two males which are known to have been hacked at LBL successfully nested 13 km (8 miles) and 24 km (15 miles) from their hack sites. Three other banded eagles nested 13, 27, and 78 km (8, 17, and 49 miles) from the LBL and Reelfoot Lake hack sites; these eagles may have been hacked in Tennessee but this could not be confirmed.

Outside Tennessee: In 1990, there were six occupied Bald Eagle nests in Kentucky within 96 km (60 miles) of the Tennessee hack sites. Three of these nests fledged a total of six young. One mated pair, both with leg bands, fledged two young 29 km (18 miles) north of the LBL hack site. There were two occupied, but eventually abandoned, nests in Ballard County, Kentucky, approximately 80 km (50 miles) and 96 km (60 miles) north of the Reelfoot Lake hack site. A male eagle that was hacked at LBL in 1982 occupied a nest in 1989 and 1990 in south-central Indiana, 288 km (180 miles) nórth of the hack site.

THE NEXT 25 YEARS

Projections (Hatcher 1991) indicate the next 25 years should have an even greater Bald Eagle population increase than the last 25 years. Of the 220 eagles to be released by 1993 (Table 1), approximately 166 (75 percent) had not reached reproductive age in 1990.

A computer population model indicates there would *theoretically* be 62 successful nests in Tennessee's area of influence by the year 2000 (Hatcher 1991). If two-thirds of the successful nests should continue to be in Tennessee this would mean a potential of 42 successful nests for the state. However, Tennessee's percentage would likely decline as eagles move into unoccupied nesting habitat in nearby states.

Bald Eagle nesting success during the next 25 years will likely be governed primarily by available habitat, human disturbance, and our collective abilities to properly manage them.

LITERATURE CITED

ALSOP, F.J., III. 1979. Population status and management considerations of Tennessee's 13 threatened and endangered bird species. Tennessee Wildlife Resources Agency. 200 pp.

CREWS, W. E. 1980. U.S. Fish and Wildlife Service, Reelfoot and Lake Isom National Refuges. File Mimeogr. 2 pp.

FLOYD, J.K. 1990. Breeding ecology of bald eagles at Cross Creek National Wildlife Refuge. M.S. Thesis, Murray State University, Murray, KY. 89 pp.

HATCHER, R.M. 1991. Computer model projections of bald eagle nesting in Tennessee. J. Tn. Acad. Sci. 66:225-228.

NYE, P.E. 1980. Successful establishment of nesting Bald Eagles by hacking. Abstract from Raptor Research Foundation Annual Meeting, October, 1980. Duluth, MN.

SHERROD, B.K., and T.J. Cade. 1978. Release of peregrines by hacking. pp. 121-136 *in* Greer, T.G. (ed.) Birds of Prey Management Techniques, British Falconers' Club, Oxford.

Most of the data and parts of the text of this manuscript were originally published by R. M. Hatcher in the *Journal of the Tennessee Academy of Science*, Vol. 66, 1991. Permission of the editor of the *Journal of the Tennessee Academy of Science*, Ms. Libby Workman, to include the material in this issue of *The Migrant* is gratefully acknowledged.

Table 1. Tennessee's Bald Eagle hacking projects and plans, 1980-1993.

Hack Site	Years of Hacking	Releases 1980-90	Releases 1991-93	Nest Goals*	Target Year
Land-Between-Lakes	1980-88	44	0	15	1977
Reelfoot Lake	1981-88	43	0	12	1999
Dale Hollow Lake	1987-91	32	10	8	1998
Chickamauga Lake	1990-92	20	22	10	2005
Scottsboro	1990-92	7	12	6	2006
South Holston Lake	1991-93	0	30	10	2007
	Totals	146	74	61	

*Estimated carrying capacity.

Table 2. Bald Eagle nesting in Tennessee, 1983-1990.

	'83	'84	'85	'86	'87	'88	'89	'90	Total
Number fledged	1	2	3	7	9	15	10*	14*	61
Successful nests	1	2	2	4	5	8	6*	6*	34
Occupied nests	1	3	6	8	8	10	12	14	62
Number of fledglings/ successful nest	1.0	1.0	1.5	1.8	1.8	1.9	1.7	1.7	1.8
Number of fledglings/ occupied nest	1.0	0.7	0.9	0.9	1.1	1.5	0.8	1.0	1.0

*During 1989 and 1990, a total of 4 nests had 7 additional young; 4 young were killed and 3 had unknown fates.

The Migrant, 61(4): 92-94, 1990.

RECOVERY OF THE EAST TENNESSEE OSPREY POPULATION

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Although there is little early information available, the Osprey (*Pandion haliaetus*) was apparently never a common breeding bird in east Tennessee. Early in this century, Osprey habitat was limited to the larger rivers, a few small natural lakes, and a few small reservoirs in east Tennessee. Nest records from this early period include Ganier's report of a nest at Mullins Cove on Hales Bar Reservoir (presently part of Nickajack Reservoir) in Marion County (Ganier 1933), a 1937 attempt at Andrew Jackson Lake in Knox County (Walker 1937), and a pair building a nest at Davy Crockett Lake in Greene County in 1940 (White 1956). The Knox County attempt was unsuccessful because local residents tore down two consecutive nests under construction, accusing the birds of eating too many fish (Walker 1937).

Following the construction of the Tennessee Valley Authority reservoirs in the 1930's and 1940's, the amount of suitable Osprey habitat in east Tennessee greatly increased. The first published report of Ospreys nesting on the TVA reservoirs was from Watts Bar Reservoir in 1961 (Comstock 1961; Owen 1963). In that year the U.S. Coast Guard presented a nest with a portion of a hatched egg to the Elise Chapin Audubon Sanctuary in Chattanooga. The nest had been removed during repair work on the Euchee light navigation marker, about 10 km above Watts Bar Dam. Ospreys apparently began building on the Euchee light in 1958, and the Coast Guard removed these earlier nests. The success of these nesting attempts is unknown.

The Euchee light continued to be used by Ospreys until the deteriorating structure was dismantled in 1987; the nest was placed on a pole erected at the site. Ospreys continue to nest on the pole, and this site probably has the longest record of continuous use of any Osprey nest site in the state. From 1961 through 1976, nest attempts were monitored by TOS members. Although eggs were laid during several years, no young were fledged. Other Osprey nests were reported on Chickamauga Reservoir near Hiwassee Island in 1967 and 1968, but no fledglings were produced (Dubke 1967; K. Dubke, pers. comm.). A nest was also reported on upper Chickamauga Reservoir on Yellow Creek in 1969. Two nestlings were present in this nest in 1973 and 1975, but they did not successfully fledge. In 1969, a second nest was present on Watts Bar Reservoir in the White's Creek area; this nest contained two eggs, but it did not fledge young.

Active management of the Osprey population began in 1976. Following the 1976 nesting season, the nest on the Euchee light navigation marker was removed by TVA personnel, and, with the permission of the Coast Guard, replaced in early 1977 on a 1.2 m square elevated wooden platform above the light on the marker. A pair of Ospreys accepted the nest and successfully fledged three young. A partially built nest was also discovered in 1977 on the White's Creek navigation marker about 8 km upstream of the Euchee nest.

Following the success of the Euchee nest in 1977, management activities increased in 1978. To provide a more secure nest site, an artificial nest was built in the top of a tree on a nearby island. The nest on the White's Creek light was removed, and the light was modified to discourage the pair from returning. The pair accepted the new nest site and two fledglings were successfully produced. The Euchee light nest was monitored, and two apparently infertile eggs were found and removed. In mid-June, two nestlings were obtained from nests on the Chesapeake Bay, flown to Tennessee, and placed in the Euchee nest. Both foster nestlings successfully fledged.

Based on the success of the fostered young and results of raptor hacking programs elsewhere, hacking of Ospreys began in in 1979 (Hammer 1981). Hacking is the process of taking young from a healthy population and rearing them to independence in the recovery area with minimal exposure to humans to avoid imprinting. Once the birds mature, they return to the hacking area to nest. TVA biologists and cooperators placed young Ospreys, taken from nests on the Chesapeake Bay, in artificial nests on Chickamauga and Norris Reservoirs. The four young successfully fledged. In the following years, Ospreys were hacked at additional sites on Chickamauga, Nickajack, Watts Bar, Fort Loudoun, Douglas and Cherokee Reservoirs, and at the lake on Bays Mountain in Sullivan County. A pair of Ospreys attempted nesting on Holston Army Ammunition Plant in Hawkins County in 1987 and successfully nested in 1988. These birds were probably from the hacking project at nearby Bays Mountain. There is no other evidence that east Tennessee hacking efforts resulted in established nesting populations.

Meanwhile, efforts to increase the naturally nesting east Tennessee Osprey population continued. The growth of this population is shown in Figure 1. Two efforts to relocate nests from Watts Bar navigation structures to treetop, artificial nests on large islands were unsuccessful. These treetop nests were below the surrounding tree canopy and had limited visibility. We therefore concentrated on providing elevated nesting platforms with good visibility. Prior to the 1983 nesting season, six navigation structures were modified to provide a secure nest platform mounted on a tripod above the light. This allowed Ospreys to nest on the structures without interfering with their navigation function. Five of the six had active nests during the 1983 season. That same year, the Tennessee Wildlife Resources Agency also placed two pole-mounted platforms on islands within wildlife management areas on Watts Bar; both were used during the 1983 nesting season. Erection of pole-mounted platforms has continued, and all manmade nesting structures have been occupied at one time or another. In recent years, several nests have been discovered in trees along the shoreline. These shoreline habitats were previously considered low quality nesting sites. Their use may indicate a lack of optimum nest sites, which appears to be the only factor limiting the continued growth of the population. Watts Bar has apparently not reached its carrying capacity and we plan to provide more nesting structures.

Ospreys from the Watts Bar population have also expanded to nearby reservoirs. In 1986, a pair built a nest at Hiwassee Island, Chickamauga Reservoir. This area was also used in 1987, but was apparently unsuccessful each year. In 1988, a pair successfully nested on a wood power pole at the upstream end of Melton Hill Reservoir near Clinton in Anderson County. The pair returned in 1989, but nesting was not successful. A dead Osprey, killed by a gunshot, was found late that spring

a few kilometers from the nest. Nesting structures were built on Melton Hill below Solway, and young fledged from one nest in 1990 and two in 1991. A pair built a nest on a dead tree near the upper end of Tellico Reservoir in 1989, but apparently did not fledge young. This nest was used by Bald Eagles in 1991. Two nests were present in 1991 on Fort Loudoun Reservoir, and one of them fledged young.

I believe the east Tennessee Osprey population will continue its rapid growth (Figure 1) for several years. This growth has shown some fluctuation, and the low numbers in 1989 may have been due to unusually heavy spring and summer rains. The 29 active nests in 1991 fledged an average of 2.3 young, a high rate compared to other populations (Henny 1988). On Watts Bar Reservoir, suitable nest sites appear to be limiting, and TWRA, in cooperation with TVA, intends to continue building more nest structures. We also plan to continue building structures on other reservoirs as their need arises.

LITERATURE CITED

COMSTOCK, R. 1961. The season: Chattanooga. Migrant 32:43-44.

DUBKE, K.H. 1967. Osprey nesting attempt near Hiwassee Island. Migrant 38:61.

GANIER, A.F. 1933. Two March days at Mullins Cove. Migrant 4:3-4.

HAMMER, D.A. 1981. Osprey reintroduction in the Tennessee Valley. pp. 104-106 *in* Odum, R.R., and J.W. Guthrie. Proc. Nongame and Endangered Wildlife Symposium. Georgia Dept. Nat. Res., Game and Fish Div., Tech. Bull. WL 5.

HENNY, C.J. 1988. Osprey. pp 73-102 *in* Palmer, R.S., Ed. Handbook of North American birds, Vol. 4. Yale Univ. Press, New Haven.

OWEN, J.B. 1963. Osprey nest on Watts Bar Lake. Migrant 34:60-62.

WALKER, W.M. 1937. The Ospreys build a nest. Migrant 8:53.

WHITE, J.B. 1956. Birds of Green County, Tennessee. Migrant 27:1-8.

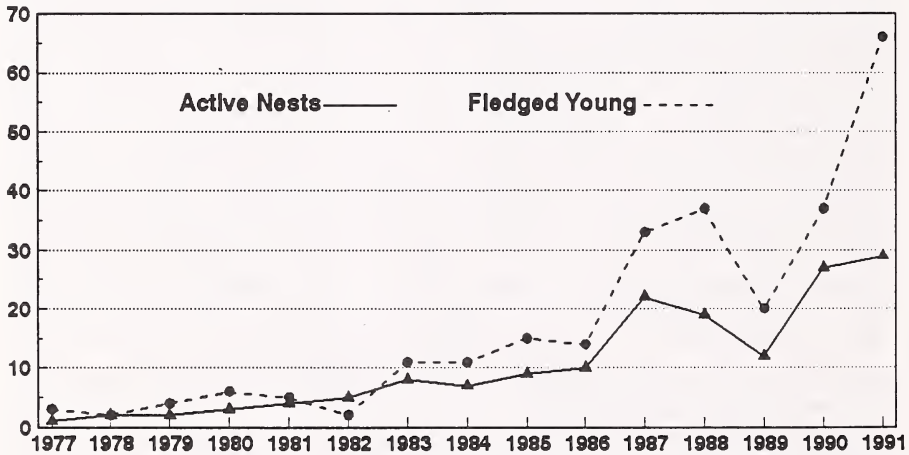

Figure 1. Growth of the Osprey population in east Tennessee, 1977-1991. The count of fledglings was incomplete in 1982 and 1988. Until 1986, all nests were on Watts Bar Reservoir.

The Migrant, 61(4):95-104, 1990.

SIZE AND TRENDS OF WADING BIRD POPULATIONS IN TENNESSEE DURING 1977-1988

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INTRODUCTION

Most heron and egret species nest in conspicuous colonies which traditionally use sites for many consecutive nesting seasons. This behavior facilitates census efforts and affords ornithologists unique opportunities to study regional population trends. Historic data on Tennessee wading birds indicate that the number of species, number of nesting colonies, and total breeding pairs increased in the 1930's, but declines occurred during the next two decades. Populations rebounded again in the 1960's, but by 1972 significant declines were reported (Pitts 1973).

In 1977 the Tennessee Valley Authority initiated a Valley-wide survey of colonial nesting wading birds to identify viable populations and to manage and protect colonies occupying public lands. The annual survey was conducted until 1989 when budget restraints curtailed census activities. I present data on Tennessee heronries for the 1977-1988 survey period in this report. Cattle Egret (*Bubulcus ibis*) records are sparse and have been reported elsewhere (Tanner 1989). Green-backed Herons (*Butorides striatus*) are typically solitary nesters and are ubiquitous in Tennessee, so they were not included in the survey.

METHODS

Great Blue Heron (*Ardea herodias*) populations were censused by systematic counts of active nests on aerial photographs. A Koni-Omega professional format camera equipped with a 180-millimeter f/4.5 ultratelephoto lens and EPD 120 color reversal film was used to photograph nests from a Hughs 500-C helicopter. Counts were made from color positive photographs (5.5 cm x 7.0 cm) with a dissecting microscope (16x). Surveys were conducted during the late incubation period in mid-March when newly emerging, sparse foliage provided little cover to incubating herons. Great Blue Herons generally responded to the circling helicopter by standing over their nests; this allowed clutches to be seen and active nest status confirmed.

Since Black-crowned Night-Herons (*Nycticorax nycticorax*) initiate nesting activities later than Great Blue Herons and prefer to nest below the canopy in conifers, active Night-Heron nests were determined by ground-based inspection. Nests were considered active if eggshells, nestlings, or significant concentrations of guano were present in or below nests. Visual estimates of Great Egret (*Casmerodius albus*), Little Blue Heron (*Egretta caerula*), and Yellow-crowned Night-Heron (*Nyctanassa violaceus*) populations were provided by other observers.

RESULTS

Great Blue Heron Colonies

The size and distribution of wading bird colonies in Tennessee from 1977 to 1988 are summarized in Table 1. In 1977, four colonies of Great Blue Herons were

known with a total population of 180 breeding pairs. By 1987 the documented population had increased to 2,124 pairs in 24 colonies (Table 2). Populations in the eastern and western regions increased steadily throughout the survey period. The largest single year increase in the formation of new colonies occurred in 1985 when a total of 10 new colonies was discovered in the eastern and western regions. Great Blue Heron populations in central Tennessee increased during 1982-1988 following two successive annual declines in nesting pairs (Figure 1).

I also examined the population growth rate of nine Great Blue Heron colonies (Table 3). The compound annual growth rate, *r*, indicates how fast a population is growing (Ricklefs 1975). Generally, small colonies grew more rapidly than the large colonies.

Black-crowned Night-Heron Colonies

Black-crowned Night-Heron populations increased dramatically in the eastern and central regions in 1981 (Table 2). During 1977-1980 the number of nesting pairs fluctuated slightly in the east and remained stable in the central region (Figure 2). No active nests were acknowledged in western Tennessee until the discovery of a mixed-species colony at Hales Point in 1983. However, the population size was undetermined until 1985 when 12 active nests were counted. Despite a tripling of the statewide population of Night-Herons from 1977 to 1984, the number of colony sites increased only from four to six with the two new sites (Hales Point Colony and Long Island Colony) accounting for less than 1 percent of the total population.

Great Egret, Little Blue Heron, and Yellow-crowned Night-Heron Populations

Great Egrets were reported nesting in only two sites in Tennessee during the survey period. The population at Reelfoot has grown since 1977 but my data are incomplete and do not reflect true increases. My data denote visible active nests during the March survey and typically only capture early arrivals at the Reelfoot Colony. Visual estimates on total egrets sighted in the colony during late June by other observers indicate a more rapid increase in the population than is reported here. The only other known active Great Egret nest was sighted at Waller Pond in 1986.

Little Blue Herons nested at three sites in Tennessee from 1982 through 1985 (Table 1). The Hales Point population was the largest reported with 20 active nests in 1985. The earliest sighting was eight nests near New Johnsonville in 1982. The site was abandoned after one season. One nest with three young was discovered in Houston County in 1984. The adults apparently abandoned the site after the young nestlings fell from the nest.

Reported sightings of active Yellow-crowned Night-Heron nests were received each year from 1977-1987. West Tennessee sites contained the largest known nesting populations (Table 1) with the number of nesting pairs ranging from two to 68. Nest site fidelity was relatively short for all regions with colonies occupied from a single year to a maximum four successive years. Most sites were active for only two nesting seasons.

DISCUSSION

The most conspicuous wader trend in Tennessee during recent years is the extensive range expansion by nesting Great Blue Herons. Prior to TVA dam construction along the Tennessee River, most significant nesting colonies of Great Blue Herons and Great Egrets occurred in tupelo swamps in Henry and Humphries Counties and in cypress breaks at Reelfoot Lake (Ganier 1951). Creation of Kentucky, Chickamauga, and Watts Bar Reservoirs in the 1940's provided additional lacustrine habitats with fertile, shallow water overbank feeding areas, but not without consequences to west Tennessee waders. Clearing of bottomland hardwoods prior to Kentucky Lake impoundment forced colony relocations. Thereafter, populations fluctuated until the late 1970's when Great Blue Heron numbers began to grow and small satellite colonies formed in previously unavailable habitats, especially in east Tennessee. Despite losses of significantly-sized colonies in the 1960's, remnant populations in each region (e.g., Reelfoot, Duck River, Sinking Pond, Armstrong Bend) were sufficient to rekindle growth. Most declines apparently resulted from habitat destruction including logging and drainage activities, but other sites were impacted by direct disturbance (e.g., Cranetown Colony, Gersbacher 1964).

I expect that the statewide Great Blue Heron population will continue to expand and extend its range until competition for food resources begins to limit or stabilize net productivity and adult and juvenile survival rates. Great Egret numbers are increasing in west Tennessee from the small remnant population at Reelfoot Lake. East Tennessee may benefit from a reintroduced breeding population in northeast Alabama. Future expansion into favorable habitats on Chickamauga and Watts Bar Reservoirs is very plausible.

Little Blue Herons and Snowy Egrets were severely impacted by drainage of wetlands for agriculture conversion (e.g., Ridgely and Dyersburg Colonies, Ganier 1960). Only 20 Little Blue Heron nests were acknowledged in Tennessee as late as 1985. Snowy Egrets have not nested in the state since the mid-1950's. Reestablishment of sustaining populations will have to rely on immigration by Arkansas or Missouri birds.

There is evidence that Black-crowned Night-Herons are more sensitive to organochloride pesticides than are Great Blue Herons. In 1980 significant concentrations of DDE were found in 6.5 percent of the eggs sampled in east Tennessee (Fleming et al. 1984). However, I believe productivity has been most significantly impacted by direct human disturbance and land use conflicts. East Tennessee colonies have been subjected to repeated forced relocations by requests of private landowners. The beleaguered Fort Loudoun Colony moved seven times between 1977 and 1986. In 1987 the population split into two groups, one of which nested on public land adjacent to Fort Loudoun Reservoir while the second occupied private property near Tellico Lake. Every forced relocation was followed by a decline in the number of active nests from the previous nesting season. The Cherokee Lake population fared somewhat better but still occupied five different nest sites between 1977 and 1985. During 1982-1984, the herons nested successfully on public property where the population grew from 306 to 764 breeding pairs. The herons abandoned the site in early 1985. During late March, when Black-crowned Night-Herons initiate nesting activities in east Tennessee, I found evidence of human disturbance to the site including tracks from all-terrain vehicles

and horses, charred camp sites, and spent shotgun shells. Colony location and population size during 1986-1988 is unknown. The Sevierville population occupied a privately owned loblolly pine stand from 1977 through 1981 where it grew from 132 to 423 breeding pairs. This growth accelerated the deterioration of pine trees and the birds moved in 1982. The population decreased to 303 nesting pairs in 1983 but recovered to 493 pairs by 1985. The site was abandoned in 1987 with nearby construction activities. For each of the aforementioned Black-crowned Night-Heron colonies, the number of breeding pairs increased when populations occupied undisturbed sites for two or more consecutive seasons.

In central Tennessee a similar scenario has been noted. The Bordeaux site came under state ownership and protection in 1978. The population responded by increasing from 70 pairs in 1977 to 370 nesting pairs in 1984. However, the population began to fall as nest trees deteriorated from nesting pressures and urban development continued around the perimeter of the colony (Paul Hamel, pers. comm.).

Overall, while the total Black-crowned Night-Heron population increased statewide, the number of significantly sized colonies remained unchanged from 1977 through 1984; this underscores the vulnerability of the four largest colonies. Fluctuations in Black-crowned Night-Heron numbers will likely continue until stable, protected nest sites are identified and utilized by the herons. Opportunities for expansion by displaced Bordeaux birds exist on nearby Percy Priest and Old Hickory Reservoirs. Underutilized, suitable nesting habitats on public lands occur on Cherokee and Douglas Reservoirs in east Tennessee, but very few opportunities exist on Fort Loudoun.

ACKNOWLEDGMENTS

I thank Ken Garner, Ken Dubke, Scott Atkins, Robert Hatcher, and J.B. Owen for information on Yellow-crowned Night-Heron and Little Blue Heron populations.

LITERATURE CITED

FLEMING, W.J., B.P. Pullin, and D.M. Swineford. 1984. Population trends and environmental contaminants in herons in the Tennessee Valley, 1980-81. Colonial Waterbirds 7:63-73.

GANIER, A.F. 1951. The breeding herons of Tennessee. Migrant 22:1-8.

GANIER, A.F. 1960. A new heronry in northwest Tennessee. Migrant 31:48-49.

GERSBACHER, E.O. 1964. Heronries of Reelfoot Lake — 25 years later. J. Tn. Acad. Sci. 39:15-16.

PITTS, T.D. 1973. Tennessee heron and egret colonies: 1972. Migrant 44:89-93.

RICKLEFS, R.E. 1975. Ecology. Chiron Press. Portland, Oregon.

TANNER, J.T. 1988. Changing ranges of birds in Tennessee. Migrant 59:73-87.

Figure 1. Nesting population growth of great blue herons in Tennessee from 1977 to 1987.

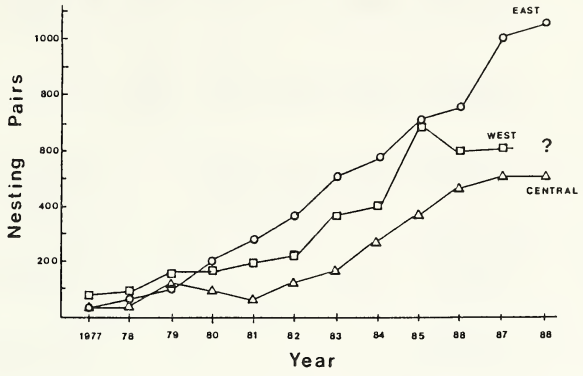
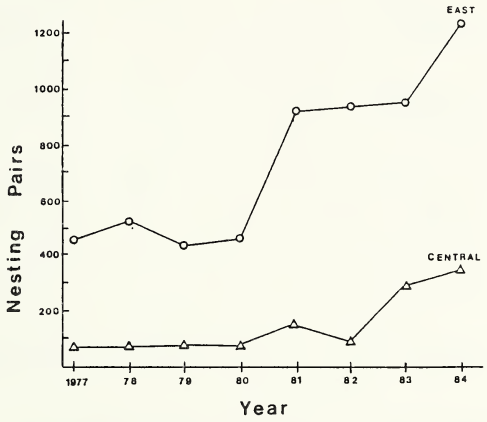


Figure 2. Black-crowned night-heron population growth in Tennessee from 1977 to 1984.



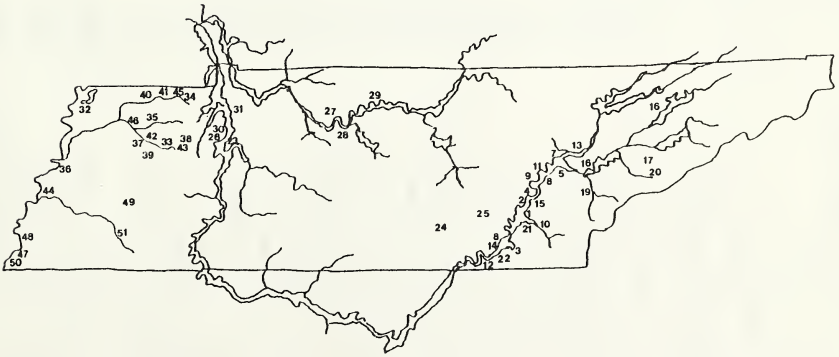


Figure 3. Locations of wading bird colonies in Tennessee during 1977-1988.

Table 1. Size and distribution of nesting wading bird populations in Tennessee during 1977–1988.

Colony	Species	Nesting Season 77	78	79	80	81	82	83	84	85	86	87	88
Eastern Region													
1. Armstrong Bend	GBH	45	74	80	159	183	230	357	351	431	440	520	529
2. Cotton Port	GBH			* 27	63	90	127	120	154	122	89	80	25
3. Savannah Bay	GBH						* 7	16	15	35	34	48	60
4. Watts Bar	GBH							* 7	9	5	5	2	0
5. Long Island	GBH							* 12	37	46	52	95	141
6. Patten Island	GBH								* 15	40	40	76	59
7. Riley Creek	GBH									* 5	0	5	4
8. Blue Springs	GBH									* 24	23	0	0
9. Wolf Creek	GBH									* 2	8	7	27
10. Ledford Island	GBH									*actv	35	77	91
11. Rowden Light	GBH									* 2	5	26	47
12. Amnicola Marsh	GBH										* 1	4	8
13. Poplar Creek	GBH										* 18	35	31
14. Dallas Bay	GBH										* 10	11	8
15. Smith Bend	GBH											* 16	26
16. Cherokee	BCNH	185	268	90	87	360	306	518	764	movd	?	?	?
17. Sevierville	BCNH	132	148	238	247	423	413	303	359	493	?	movd	?
18. Ft. Loudoun	BCNH	133	111	110	90	95	206	126	125	106	?	60	?
19. Tellico	BCNH				* 25	36	0						
Long Island	BCNH								1	5	?	?	
20. Pigeon Forge	BCNH										* 50	25	
21. Sugar Creek	YCNH						* 4	2	2	0			
22. Brainard Hills	YCNH									* 1	3	4	
Sevierville	YCNH		1										

Table 1. Size and distribution of nesting wading bird populations in Tennessee during 1977-1988. (cont.)

Colony	Species	Nesting Season 77	78	79	80	81	82	83	84	85	86	87	88
Central Region													
23. Duck River	GBH	27	32	69	70	41	80	90	156	190	237	233	203
24. Sinking Pond	GBH	18	25	30	31	37	55	88	132	197	187	190	227
25. Sequatchie	GBH			* 14	0	0							
26. Camden	GBH										* 50	83	76
27. Bordeaux	BCNH	70	70	70	50	167	100	298	370	?	324	?	?
28. Mill Creek	BCNH			25	40	0	8	0	0				
29. Gallatin	BCNH									* 20	168	200	?
Mill Creek	YCNH							1	1				
30. New Johnsonville	LBH						8	0	0				
31. White Oak Creek	LBH								* 1				
Western Region													
32. Reelfoot	GBH	90	95	135	174	183	210	202	250	281	316	350	NS
33. McKenzie	GBH					* 15	15	116	82	151	?	30	NS
34. Jones Mill	GBH							30	25	0	NS	0	
35. Dresden	GBH							* 12	22	3	0	16	NS
36. Hales Point	GBH							*actv	actv	15	?	?	?
37. Greenfield	GBH								* 24	12	3	0	NS
38. Bruceton	GBH								* 1	2	9	0	NS
39. Wingo	GBH									*100	102	154	NS
40. Latham	GBH									* 83	56	32	NS
41. Palmersville	GBH									* 23	0	0	NS

Table 1. Size and distribution of nesting wading bird populations in Tennessee during 1977-1988. (cont.)

Colony	Species	Nesting Season 77	78	79	80	81	82	83	84	85	86	87	88
Western Region (cont.)													
42. L & N	GBH									* 23	20	0	NS
43. Jarrell	GBH									* 16	27	0	NS
44. Waller Pond	GBH										* 75	0	NS
45. Midway	GBH											* 30	NS
46. Sharon	GBH											* 4	NS
Reelfoot	GE	2	2	5	10	10	12	5	15	3	16	17	NS
Waller Pond	GE										1		
47. Riverside Park	YCNH	25	25	3	3								
48. Shelby	YCNH			40	68	?	?	0	0				
49. Forked Deer	YCNH			20	14	4	?	0	2				
50. Memphis	YCNH			8	10			26	2	0			
51. Hatchie	YCNH							2	12				
Hales Point	BCNH							actv	actv	12			
Hales Point	LBH							actv	actv	20			

* - Denotes year colony was initiated or discovered during survey.
NS - Colony site not surveyed.
? - Indicates location or size of population unknown.
Numerical designation of colony refers to map location.
Actv - colony active
Movd - colony moved

Table 2. Regional and statewide summary of great blue heron and black-crowned night-heron nesting populations during 1977-1988.

Region	Species	Nesting Season 77	78	79	80	81	82	83	84	85	86	87	88
Eastern		45	74	107	222	273	364	512	581	712+	760	1002	1056
Central	GBH	45	57	113	101	78	135	178	288	387	474	506	506
Western		90	95	135	174	198	225	360+	404+	709	608	616	NS
Tennessee		180	226	355	497	549	724	1050+	1213+	1808+	1842	2124	
No. Active Colonies		4	4	6	5	6	7	12	15	24	24	24	
Eastern		450	527	438	449	914	925	947	1249	604+	?	?	?
Central	BCNH	70	70	95	90	167	108	298	370	20+	492	?	?
Western								+	+	12	?	?	?
Tennessee		520	597	533	539	1081	1033	1245+	1619+	636++			
No. Active Colonies		4	4	5	6	5	5	5	6	6			

+ - indicates known active colony, but population size undetermined
? - colony locations, size, and status unknown
NS - not surveyed by the author

Table 3. Growth percentage and compound annual growth rate (r) for nine great blue heron colonies in Tennessee.

Colony	Period	Initial Census	Last Census	Percent Change	Population Growth Rate r*
Armstrong Bend	1977-1988	45	529	1075.6%	22.4%
Savannah Bay	1979-1988	7	60	757.1%	23.9%
Long Island	1983-1988	12	141	1075.0%	49.3%
Wolf Creek	1985-1988	2	27	1250.0%	86.7%
Rowden Light	1985-1988	2	47	2250.0%	105.2%
Duck River	1977-1988	27	203	651.8%	18.3%
Sinking Pond	1977-1988	18	227	1161.1%	23.0%
Reelfoot	1977-1987	90	350	288.8%	13.6%
Wingo	1985-1988	100	154	54.0%	14.4%

* $r = \frac{\log_e N(t) - \log_e N(o)}{t} 100\%$

The Migrant, 61(4),105-106, 1990.

TRIBUTES TO THE FOUNDERS OF THE TENNESSEE ORNITHOLOGICAL SOCIETY

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When any organization reaches the milestone age of 75 years it is certainly a testimonial to the farsightedness of its founders. Such were the organizers of TOS: Dr. George R. Curtis, Mr. Albert F. Ganier, Judge H.Y. Hughes, Prof. George R. Mayfield, Sr., Mr. Dixon L. Merritt, and Prof. A.C. Webb.

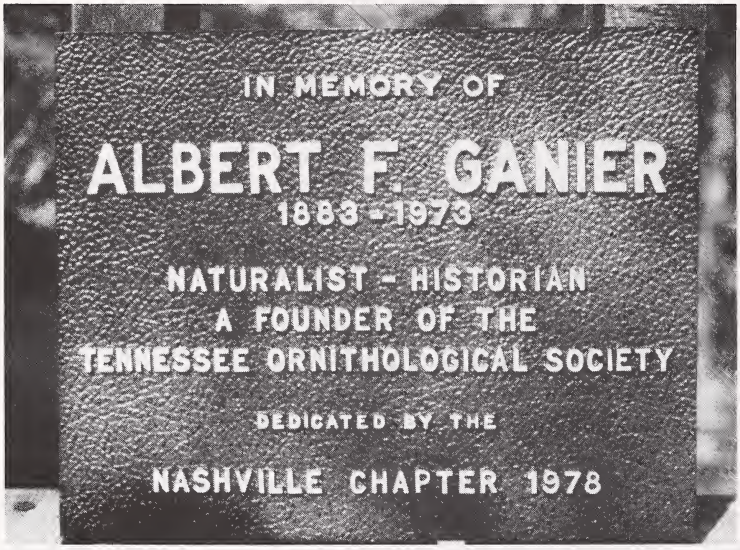
One must be mindful that when the TOS was first organized in October 1915 there was not the widespread interest in nature study and appreciation as we have come to know it today. True, three of the nationwide ornithological organizations, the American Ornithologists' Union, the Wilson Ornithological Society, and the Cooper Ornithological Society have published their respective journals, *The Auk*, *The Wilson Bulletin*, and *The Condor*, continually since the late 1800's. On a more local or regional basis bird students organized, printed journals for a period of time, and then the organizations disappeared into the mist of history. For example, in 1893 the Iowa Ornithological Association was formed and commenced publishing their journal, *The Iowa Ornithologist*. In their initial issue they commented "...to have noticed the lack of organization among the fraternity throughout the Mississippi Valley, while in the East flourishing ornithological societies are numerous." The organizers stressed in the same volume that *The Iowa Ornithologist* "...is the only Magazine, devoted to Ornithology and Oology in the Mississippi Valley." The last issue of their quarterly magazine was released in July 1898.

With this brief background in mind one must admit with pride the boldness exhibited when our founders stepped forward into the uncharted future. George R. Curtis moved away shortly after the founding while Judge H.Y. Hughes and Prof. A.C. Webb died early in the organization's history. Albert F. Ganier, George R. Mayfield, Sr., and Dixon L. Merritt survived and with their varied talents and personalities bequeathed an indelible print that is still very much in evidence throughout the organization today. In fact, these three individuals were held in such high esteem that members have erected permanent memorials to their memories.

Dixon Merritt was the first so honored in 1978 with plaques placed at the nature center that bears his name in the Cedars of Lebanon State Park. The park is located in his home county of Wilson. Companions Albert F. Ganier and George R. Mayfield, Sr. in the early years explored together the fields and woods in the area that has now been preserved as the Radnor Lake State Natural Area in Davidson County. In 1978, with respect and fondness, Nashville Chapter members memorialized Mr. Ganier with an appropriate ceremony and a plaque embedded in a stone that was placed on top of a knob in the park. The knob was also named in his honor. On Sunday, 20 May 1990, Nashville Chapter members gathered once more at Radnor Lake where they presented to the park a plaque honoring George R. Mayfield, Sr. It is now hanging in the nature center and will later be moved to a new building be displayed with other birding material. (Please see pages 114-116 for more details of this event.)

Finally, as a further token of deep gratitude to the farsightedness of all the founding fathers, Margaret Mann has, with singleminded determination, spearheaded the required research and with tenacity has won the approval of the Nashville Historical Commission to have a suitable recognition marker placed on the former site of Faucon's French Restaurant. The restaurant in downtown Nashville was the founding site for the society.

Today, the TOS is recognized as the oldest, continuously active conservation and education organization in Tennessee. Truly, from a tiny acorn an impressive oak has grown.



Photographs of memorials to two of the founders.

The Migrant, 61(4):107-108, 1990.

HISTORY OF THE ANNUAL SYMPOSIUM AND TOS FALL MEETING

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Since the formation of the TOS in October, 1915 the organization has, over the years, expanded the number and variety of activities for its members. Some examples include: the summer foray, begun in 1936; spring bird counts, begun in 1946; and, the annual hawks counts, begun in 1951. The Fall Meeting and Symposium has a more recent origin.

The first fall Tennessee Ornithological Symposium was held at Pete Smith's Watts Bar Resort, on Watts Bar Lake, 28 October 1967. During the first three years the symposium was informally sponsored by TOS members and held in East Tennessee. In 1970, the TOS assumed formal organizational responsibility.

The genesis for this type of an event occurred on a long automobile trip to Virginia and West Virginia by Wallace Coffey, Ken Dubke, and Charlie Smith. The original idea proposed was that we would invite others, meet in a central location, and if only the three of us showed up it would be considered a success. A total of eleven people attended the initial event so all were in agreement that it was overwhelmingly successful.

The first symposium set the tone and the format for all subsequent gatherings. The original invitation stated the purpose as follows: "To bring to the fore research projects that are currently being carried on and focus attention on areas that participants may wish to explore. Also, a discussion of how the results may be published in *The Migrant* to reach the maximum number of interested individuals."

Since the original printing of the program for the first symposium had a limited distribution, the list of speakers and the abstracts of the papers are given below.

1967 Hawk Migration. Thomas C. Finucane. A summary of this year's results with the cooperative project.

Nesting East Tennessee Osprey: Past, Present and Future. Kenneth H. Dubke. From the evidence on hand it appears there has been a small nesting population for many years. It appears there is still one. A discussion of the evidence and present plans to make an actual census to determine their future.

Amnicola Marsh Nesting Birds. Jon E. DeVore. This relatively new habitat was at optimum condition for nesting marsh species this season. A discussion of field studies carried out there.

Preliminary Study of Nesting Red-winged Blackbirds. Charles R. Smith.

Initiating an Audubon Breeding Bird Census. Joseph C. Howell. There has been considerable talk in recent years on the reduction of certain species of birds. A discussion led by an expert on how

to survey an area to determine absolute abundance, instead of the usual relative abundance.

The Migrant in Progress — Our Changing Times. John Wallace Coffey.

Tennessee's Participation in the Cornell Nest Card Program. Albert F. Ganier. Over a lifetime Mr. Ganier has made an intensive study of Tennessee's various nesting species. He will show there is still a tremendous amount to be learned and how it can be used in the Cornell Nest Card Program.

The next day the symposium participants joined in the traditional Hiwassee Island Barge Trip to view the waterfowl concentrations in the Blythe Ferry area located between Dayton and Cleveland.

For the first ten years, Ken Dubke had the sole responsibility of organizing the event while Wallace Coffey had the task of preparing the colorful brochures for Ken to distribute. Ken also made all of the facility arrangements for the first nine years; then, George R. Mayfield, Jr. offered to shoulder this duty.

For the years 1977 to 1984, T. David Pitts assumed responsibility for lining up a slate of speakers for the programs. George Mayfield continued to arrange for facilities and the meeting locations with the preferred geographical emphasis somewhere in the mid-state area. The central location was desired in order to reduce travel time from distant corners of the state and thus make it more convenient for additional people to attend.

In 1979 the event was held in Gallatin with the arrangements hosted by the Nashville Chapter; field trips and other activities were coordinated by Dot and Paul Crawford. That year set a precedent whereby central Tennessee chapters made arrangements and their members led the popular field trips to nearby birding locations. Since then, all of the middle Tennessee chapters (Columbia, Murfreesboro, Highland Rim, John W. Sellars, and Buffalo River) have been involved. An east Tennessee chapter, Chattanooga, hosted the 1985 meeting at Fall Creek Falls State Park.

In 1985 Fred J. Alsop, III was responsible for the program arrangements. He was followed by Stephen J. Stedman for the years 1986 and 1987. David H. Synder took up the reins for 1988 and 1989.

In 1988 the TOS held a joint meeting with the Alabama Ornithological Society at Land-Between-the-Lakes. The nearby Warioto Audubon Society and Austin Peay State University co-hosted the activities. The meeting moved to Crossville in 1989 with George Mayfield again making the facility and field trip arrangements. In this task he was assisted by members of the newly formed Cumberland County Chapter.

It appears that the original format initiated in 1967 has now been tested by time and has been well received and accepted by the membership. With continued strong interest and support the fall meeting and symposium should be a popular TOS activity into the future.

The Migrant, 61(4):109-113, 1990.

THE 1990 TOS DISTINGUISHED SERVICE AWARDS

Ron Hoff
2512 Gray Hendrix Rd.
Knoxville, TN 37931

At the 1989 TOS Fall Meeting the Board of Directors approved the establishment of annual awards to be given to persons who have made significant and lasting contributions to the Tennessee Ornithological Society. A committee consisting of Ron Hoff (Chair), Barbara Finney, and Richard Newton reviewed nominations and selected 10 recipients based on past contributions and geographical location. Numerous worthy members could not be honored this year. Some of the persons submitting nominations asked to remain anonymous; these requests have been honored and, to be consistent, none of the other persons who prepared nominations are listed. Copies of the nominations and the decisions of the committee have been placed in the editor's files. On behalf of the committee I thank all of the individuals who prepared nominations. On behalf of TOS I express thanks to all of the recipients for their contributions. The recipients are listed alphabetically. The contributions of each recipient are numerous; in fact, an entire issue of *The Migrant* might be necessary to adequately describe their activities. Consequently, a synopsis of their contributions is presented.

SUE BELL
(Mrs. William F. Bell, Sr.)
Nashville Chapter

Since 1949 Mrs. Bell has been an interested, active, and dedicated member of TOS. She has served as State President, Chapter President, and member of the chapter Records Committee. She has participated in Breeding Bird Surveys and was the instigator of the Hawk Watch held at Bon Air. No mention of her talents and activities would be complete without commenting on her gracious hospitality as hostess of innumerable compilations, committee meetings, and other gatherings.

MISS MARY DAVANT
Memphis Chapter

Miss Davant is a charter member of the Memphis Chapter which was organized in January 1930. Over the past 60 years she has been a mainstay of the chapter. Along with Ben Coffey and Jack Embury, two other charter members, she tirelessly promoted the new organization. She served as Chapter President three times, the only member to serve more than once. She also has served as Vice-President for West Tennessee as a State Director on several occasions. She participated in innumerable Chimney Swift banding sessions as part of the famous Memphis project. A librarian, she often researched information for the chapter. She prepared the history of the chapters of TOS for the Golden Anniversary issue. For the past 60 years she has distinguished herself as a leader, worker and friend of the Memphis Chapter and TOS.

KEN DUBKE
Chattanooga Chapter

Mr. Dubke has served as TOS President, Treasurer, and Conservation Committee Chairman in addition to being on numerous other committees and a State Director. He and his wife (see below) have diligently supported and promoted the Chattanooga Chapter of which he has served as President and in other capacities. He has run Breeding Bird Survey routes for 20 years and has worked numerous blocks in the Breeding Bird Atlas project. He was a co-founder of the TOS Symposium and Fall Meeting, of which he has not missed a meeting. He has travelled many miles, written a multitude of letters, and made myriad phone calls on behalf of habitat conservation.

LIL DUBKE
(Mrs. Kenneth Dubke)
Chattanooga Chapter

Mrs. Dubke has served as TOS Vice President and on numerous committees. She has served as President of the Chattanooga Chapter and has for many years compiled and edited "The Chat", the monthly newsletter of the Chattanooga Chapter. She has conducted breeding bird surveys for 17 years and has worked many blocks in the Breeding Bird Atlas project. She was a leader in the effort to preserve Amnicola Marsh. She and her husband Ken have participated in numerous Hawk Watches, Raptor Surveys, Sandhill Crane Surveys, and Eagle Surveys. She has tirelessly and enthusiastically promoted birding, not only in the Chattanooga area, but across the state.

DR. KATHERINE GOODPASTURE
Nashville Chapter

Dr. Goodpasture joined the Nashville Chapter in 1940. She soon became one of the leaders in ornithological studies and activities in the area. She has banded numerous birds, maintained accurate records, and written many articles for state, regional, and national journals. For 20 years she coordinated the Breeding Bird Surveys in Tennessee; she ran several routes and was consistently able to maintain a cadre for the completion of the other routes. She directed the monitoring of TV tower kills in Nashville. She has participated in all counts and activities of the Nashville Chapter and has held many offices. She has worked with birds in Tennessee at a time when there were and are distinguished persons contributing to ornithological knowledge of Tennessee. She has complemented them with her broad understanding of research, her careful counsel, and above all her personal ability to inspire and teach. Her name is synonymous with careful work, accurate recording, and scholarly writing.

LOIS HERNDON
(Mrs. Lee R. Herndon)
Lee R. Herndon Chapter

Mrs. Herndon became a member of TOS in 1944. Since then she has held numerous chapter offices. She has participated in and supported both chapter and state activities. When her late husband received justly deserved recognition for his contributions to TOS, many members, including Dr. Herndon himself, recognized that her contributions, although not always as obvious, where especially important.

J.B. OWEN
Knoxville Chapter

By way of his regular columns in the Knoxville newspapers Mr. Owen has reached and influenced more of the general public than perhaps anyone else in TOS. His columns were published in the *Knoxville Journal* from 1960-1972 and in the *Knoxville News-Sentinel* from 1973 to the present. Drawing on his own field experiences, the records of the local chapter and its members, and the publications of recognized authorities he has explained bird life and its study to thousands of readers. He became a member of TOS in 1947; since then he has served in a variety of offices at both the chapter and state level.

DR. ARLO SMITH
Memphis Chapter

Dr. Smith has been an active member of TOS for more than 30 years. During this time he has demonstrated his concerns about environmental issues in a number of ways. He was a leader in the successful efforts to prevent the construction of Interstate 40 through Overton Park and the Memphis Zoo. He authored a definitive work on the wildflowers of the Mid-South. For years he has been a stalwart member of organizations which seek to protect the environment and preserve the natural areas of our state and nation. He has delighted audiences with his presentations and photographs of wildflowers and birds.

NOREEN SMITH
(Mrs. Arlo Smith)
Memphis Chapter

Mrs. Smith has been a member of TOS since 1953. She has served as Chapter Secretary and President and State Director, Vice-President, and President. She has run Breeding Bird Survey routes each year for 23 years, in addition to participating in chapter counts and hikes. She assisted in compiling and tabulating 50 years of bird sighting records in Shelby County for publication. On a statewide basis she is best known for her efforts in the eagle hacking program at Reelfoot Lake. During the first year, she and her husband Arlo ran the project with relief only on weekends. In the following years she continued to recruit and coordinate volunteer participants. Both she and Arlo continue their active participation in the Breeding Bird Atlas project.

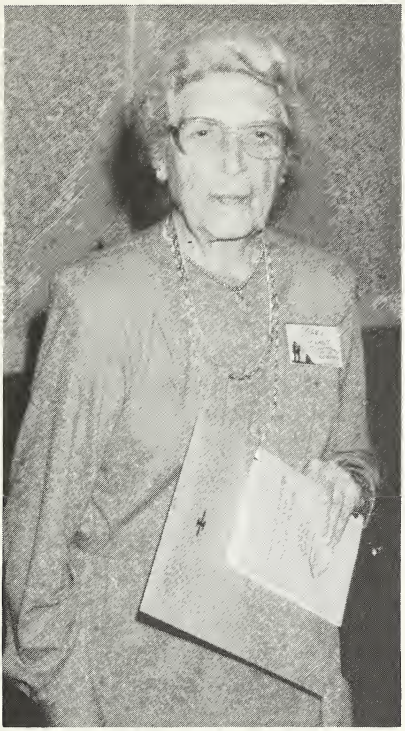
DR. JAMES T. TANNER
Knoxville Chapter

Dr. Tanner became a member of TOS in 1940. Since then he has served the society as President, Editor, and Curator in addition to his involvement in numerous committees and other activities of TOS. He was a founder of the chapter in Johnson City and later an active member in the Knoxville Chapter. He has published many articles in *The Migrant* and other journals, but he is most recognized for his study of the Ivory-billed Woodpecker. Many students have benefited over the years from his patient and perceptive counseling and from the high standards of research and writing that he both demonstrated and expected of others.

Ken and Lil Dubke

Mrs. Herndon

Sue Bell



Mary Davant

J .B. Owen

Noreen and Arlo Smith

The Migrant, 61(4):114-116, 1990.

DEDICATION OF PLAQUE HONORING DR. GEORGE R. MAYFIELD, SR.

Submitted by the
Nashville Chapter of TOS

The 20 May 1990 meeting of the Nashville Chapter of TOS was held at Radnor Lake to dedicate a bronze plaque in memory of Dr. George R. Mayfield, Sr. Seventy people attended. Dr. George R. Mayfield, Jr., his wife Cleo, and their two sons, Rad and Mark, were present for the dedication; their daughter Rebecca, could not attend. The late Dr. Mayfield's wife was unable to attend; she is 101 and lives in Columbia.

Chapter President Dick Newton introduced Dr. George R. Mayfield, Jr. who presented a bronze plaque in memory of his father to Mack Prichard, State Naturalist of the Tennessee Department of Conservation. The plaque is to be placed in the Radnor Lake Nature Center along with a photograph of Dr. Mayfield, Sr. Oscar Patrick designed the plaque. The concept of the plaque was conceived by Katherine Goodpasture (TOS member since 1940) and Vernon Sharp (TOS member since 1921) in 1980. George's plane accident set aside all activities.

George gave a synopsis of his father's life. Vernon Sharp and George Woodring (TOS member since 1927) interjected comments about pertinent activities that occurred in the 1920's and 1930's.

"Dr. Mayfield was born in 1877 near Lawrenceville, Georgia (just east of Atlanta). He graduated from Emory University in 1900 with honors. He moved to Nashville in 1904 to begin graduate study in German at Vanderbilt University where he received M.A. and Ph.D. degrees. He remained at Vanderbilt, eventually becoming Professor of German and department head; he retired in 1947. He took a keen interest in many students, even those who did not take German. Several prominent Nashvillians have confided to me that if it had not been for the encouragement and help of Dr. Mayfield, they would have not graduated from Vanderbilt.

About 1910 he suffered a ruptured appendix and was confined to his room in old Wesley Hall, on the Vanderbilt campus, where the Joint Library now stands. The campus was mostly woods with few buildings at that time. He began listening to birdsongs out his window. This led to his lifelong interest in birds and birding. In the following years he met Albert F. Ganier who shared his interest.

This led to the founding of the Tennessee Ornithological Society on October 7, 1915, when five men, including Mayfield, Ganier, Judge H.Y. Hughes, Professor A.C. Webb, and Dixon Merritt met at Faucon's Restaurant for that purpose. Webb was elected first President but Mayfield and Ganier played leading roles in the development of the society. Dr. George M. Curtis joined TOS shortly after its founding.

In 1916 the first female member was elected, Lillie Lenore Hassock of Nashville. She was to become the Secretary of TOS in 1918 and the wife of Dr. Mayfield in 1920. Their favorite rendezvous consisted of riding the Gendale (#8) street car out 10th Avenue to the end of Radnor Hills and hiking over to Radnor Lake to see the wildflowers and listen to birdsongs.

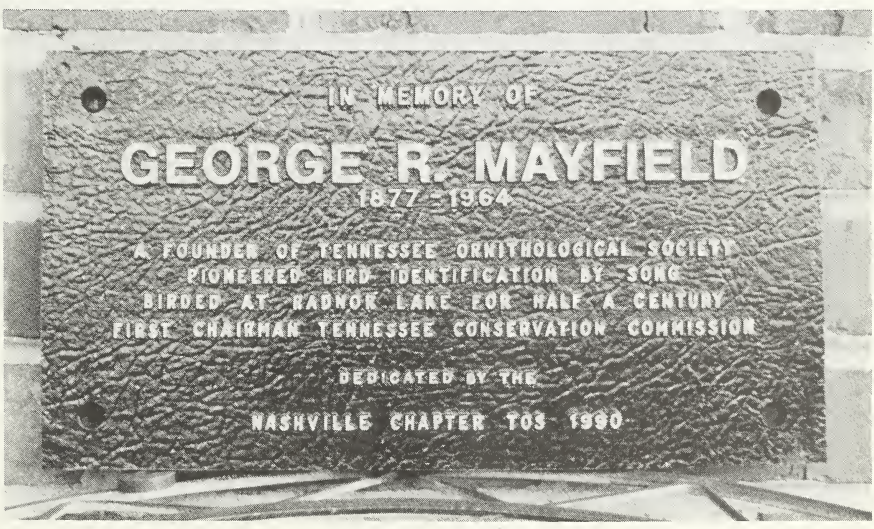
The 1935 (20th Anniversary Issue) of *The Migrant* describes Dr. Mayfield as "...our most consistent field worker who has done more work in recording the movement of migratory birds than any other member." He served as secretary of TOS in 1916-1917 and twice as President, in 1920-1921 and 1934-1935.

In 1923 a chapter of TOS was formed in Knoxville under the leadership of Harry P. Ijams, a writer for the *Knoxville News-Sentinel.* In 1929 a Memphis chapter was organized under the leadership of Ben B. Coffey, who was a biology student of Lillie Mayfield at old Hume Fogg High School on 8th and Broad. In 1931 the TOS initiated its official publication *The Migrant* whose first editor was George Woodring of Nashville. Ganier and Coffey are among those who have edited this highly regarded journal. In the 1930's a "Blue Grass" chapter of TOS was organized under the leadership of Mayfield, Ganier, and Daniel R. Gray, Sr., of Columbia. Members included birders from Columbia, Pulaski, and Lewisburg. Other chapters were organized prior to 1935 in Clarksville, Murfreesboro, Dickson, and upper East Tennessee under the leadership of Alfred Clebsch, H.O. Todd, and Bruce Tyler, respectively.

Early active Nashville members included Vernon Sharp, Harry Vaughn, Jesse Shaver, Harry Monk and Amelia Laskey (who became a Fellow of the American Ornithologist' Union). Annual field days, usually on the first Sunday in May, were established. These began in Nashville, but were later held by other chapters. Annual meetings began as small gatherings of the faithful on sandbars after lunch at such places as Sycamore Creek, Craggie Hope, Birds I View. In 1938 a constitution was adopted and a Board of Directors from all over the state was formed.

In 1939 a former student of Dr. Mayfield's was running for Governor. He stated that if elected, he would nominate his former teacher to the Conservation Commission. Governor Cooper kept his word and Dr. Mayfield served on the Commission until 1955 and was elected its first chairman." (end of George R. Mayfield, Jr.'s comments.)

This was a chapter effort and many members were involved to make this a successful 75th Anniversary Nashville Chapter meeting.



Photograph of a memorial to a founder.

1. Group photo — Nashville TOS
2. Group photo
3. Group leaving dedication at Radnor Lake Nature Center
4. Group photo at presentation
5. Nashville Chapter President 1989 - 91, Dick Newton
6. Louise Jackson, Oma Vaughn, Frances Abernathy, Lillian Sharp
7. George Woodring, Rad Mayfield, Vernon Sharp
8. David Vogt, Jane Maynard, Mark Mayfield, Ann Houk
9. George R. Mayfield, Jr., Mac Pritchard

The Migrant, 61(4):117-118, 1990.

A CRISIS IN TENNESSEE ORNITHOLOGY?

Charles P. Nicholson
Tennessee Valley Authority
Norris, TN 37828

No, this is not about the barrage of threats, such as forest fragmentation, tropical deforestation, cowbirds, global warming, and human population growth, facing our birdlife. It does, however, deal with our ability to detect and react to the impacts of these threats on our birdlife. This is about the dramatic decline in field ornithology which has occurred in Tennessee in the last few years. Here are some examples of this decline:

— Participation in Christmas Bird Counts increased between 1979 and 1984, and then declined by 1989 (1990 data not available as I write this). Consider the number of participants and party hours for four of the largest Christmas Bird Counts in Tennessee between 1979 and 1989.

Knoxville — 1979: 16 observers, 70 party hours
1984: 27 observers, 122 party hours
1989: 21 observers, 72 party hours

Great Smoky Mountains — 1979: 33 observers, 113 party hours
1984: 27 observers, 87 party hours
1989: 19 observers, 72 party hours

Nashville — 1979: 46 observers, 97 party hours
1984: 49 observers, 123 party hours
1989: 18 observers, 62 party hours

Memphis — 1979: 32 observers, 125 party hours
1984: 45 observers, 128 party hours
1989: 35 observers, 96 party hours.

— Participation in the Spring Field Days shows a decline similar to that of the Christmas counts. Both the spring and Christmas counts are "easy" forms of field ornithology, not requiring intimate knowledge of bird songs, rising hours before dawn, or intricately detailed note-taking.

— The number of contributors to the "Season Reports" published in *The Migrant* has declined in recent years.

— Until the mid-1980's, Tennessee had one of the best records of any state in completing all of the U.S. Fish and Wildlife Service Breeding Bird Survey Routes each year. In most (or all?) years since then, one or more routes were not completed. The turnover in observers has also increased in the last few years, which affects the interpretation of the results. I admit (having run over 50 routes in the last 18 years) that BBS routes are not easy, but if we got them all done in the past, why can't we now?

— Participation in the hawk watches each fall has declined to the point that not enough data are being submitted to *The Migrant* to justify retention of the annual report.

— Only about 40 percent of all TOS members contributed bird records to the Tennessee Breeding Bird Atlas Project, despite the efforts of those of us

managing the project to make it easy for everyone to participate. Two-thirds of all the Atlas field-work was done by fewer than 10 percent of all TOS members.

I wish I could explain why this decline is occurring and could prescribe a remedy. While Atlas fieldwork was underway, several skilled birders told me they either did not have the time to participate in atlasing, or did not want to bother with the necessary record-keeping. Yet, many of these same birders (I can not call them amateur ornithologists) drive across the state at the drop of a hat to see "THE" List-building Newbird, while keeping meticulously detailed lists by American Birding Association region, state, and year. The decline in participation is occurring at a time when environmental awareness is supposed to be at an all-time high. Our children are taking environmental education courses, and there is more quality natural history programming on television than ever before. Yet, as I begin my third decade as a TOS member, I am still one of the youngest members of my chapter.

I welcome your responses to my comments and your proposed solutions to the problems described above.

Immature Bald Eagle in hacking tower at Scottsboro.

The Migrant, 61(4):119-121, 1990.

TOS DURING 1965-1990: A PERSPECTIVE

T. David Pitts

Members and chapters of TOS have been involved in many activities since 1965. Which of these will be of most value to future generations? What could, or should, we have done instead of, or in addition to, those accomplishments? Only the passage of time will allow accurate recognition of our lasting contributions as well as our shortcomings. Each of us has a unique viewpoint. My perspective is biased by many factors such as my occupation as a professional biologist, my 25+ years as a TOS member, my position as a Member-at-Large rather than a chapter member, and my preference for being called a bird-watcher rather than a birder. I ask readers to keep these factors in mind as I review some of the events of the past 25 years and comment on the role and future of TOS.

Two of the most important data collecting activities in Tennessee since 1965 are the North American Breeding Bird Surveys (= BBS) and the Tennessee Breeding Bird Atlas project. Many of the 42 BBS routes in Tennessee were first run in 1966; since then most of these routes have been run each year. This project is sponsored and coordinated by the U.S. Fish and Wildlife Service, not TOS, but most of the participants in Tennessee are members of TOS. Few of the data from Tennessee have been published, but with time the data base will become increasingly valuable. For many species, the BBS data are the only records available that describe the relative sizes of populations since 1966. The Atlas project, which began in 1986, is a short-term (compared to the BBS) effort to describe the range, population size, and other characteristics of each of the bird species that nests in Tennessee. The results of 6 years of intensive data collecting in this project supplement the BBS and will provide a basis of comparison for decades to come. The data are now being prepared for publication in book form.

Several members of TOS have participated in restoration projects during the past 25 years. Breeding populations of Bald Eagles, Osprey, and, more recently, Peregrine Falcons have been either re-established or significantly increased by the release of young birds in Tennessee and adjacent states. As a consequence, the future of these species as breeding birds in Tennessee seems more secure now than in 1965. However, the number of breeding pairs of these species is still low.

Most of the restoration efforts have focused on species which are large and conspicuous. During the next 25 years, much attention will probably be devoted to species whose members are smaller and not as easily recognized by the general public. The Neotropical migrants are beginning to receive some of the attention they deserve. The populations of many Neotropical migrants have declined in recent years; identification of the causes and implementation of solutions will be difficult and expensive, but worthwhile.

One of the first issues of *The Migrant* I received as a new member was the 50th anniversary issue. I learned much about TOS from that issue. However, since that time I have discovered that many additional items could have been presented. Some of these might have been construed as casting shadows on the shining image of TOS. In reality, I think it is important to recognize that not all TOS members agree on certain issues and that TOS, like any other organization composed of persons with diverse interests and backgrounds, will have internal controversies. In earlier

years the egg collectors and those who did not collect eggs were frequently at odds, although this was rarely mentioned in *The Migrant*. In some cases, information on the nesting sites of rare species was not published because of the likelihood that collectors would take the eggs. Today, the issues may differ but diversity still abounds. For example, in the last 25 years birding has become big business. Binoculars, spotting scopes, identification guides, site guides, special tours, and magazines are promoted for the purpose of observing, identifying, and listing various species of birds. "The List" is the primary objective of many birders. Enjoyment of birds by building lists is certainly a legitimate activity, but does listing contribute to ornithology? In some cases, yes; numerous records of range changes and other occurrences have been documented as a result of listers. In many cases, listing contributes little, if any, to ornithology. During my term as editor, I have heard numerous reports of rarities in Tennessee that have never been published. In some cases the parties involved have made no attempt to publish such records. In some cases the attitude seems to have been, "If it is on my list, that is all that counts." In other cases, the persons involved have made preliminary efforts to publish their records but gave up when they realized that publication in a scientific journal requires documentation of identification, a process that some do not wish to complete. In other cases, reports were not submitted because of personal conflicts between individuals. These omissions are unfortunate; future generations will be deprived of some potentially valuable records.

Listing is challenging and can, I am told, be fun and exciting; it can also produce records of value. While I recognize the recreational value of listing and the contributions it may make, the value of intensive study of our common species should not be overlooked. In some cases we know more about the biology of certain rare species in Tennessee than we do about some of the common species. Thankfully, ornithology in Tennessee is not restricted to listing. Some (most, in my experience) listers prefer to be called "birders" not "bird watchers." I am a bird watcher not a lister; in fact, I object to being referred to as a birder. Regardless of what we as individuals prefer to be called, TOS should be broad enough to encompass a diversity of individuals and interests so long as studying birds is our purpose. Each group can make contributions, but each should recognize the motivations and contributions of the other groups.

During the past 25 years there has been a proliferation of organizations and societies promoting one or a few species. In addition to older organizations such as Ducks Unlimited, newer groups such as Quail Unlimited, the American Turkey Federation, the North American Bluebird Society, and the Purple Martin Association have many Tennessee members. Other groups such as the National Audubon Society and the Tennessee Conservation League make important contributions. The TOS can not, and should not, compete with these groups. Many TOS members also actively support many of these other groups. The TOS has defined its role as the recording and promoting of bird studies in Tennessee. I believe this continues to be a legitimate function. The TOS cannot be "everything to everybody." This may be part of the reason for the relatively small membership of TOS and the high turnover rate of members. I suspect that many new members join TOS with the expectation of receiving colorful issues of *The Migrant* that describe identification techniques for beginners, methods of attracting birds to yards and feeders, and other similar types of information. This type of service is important, but I perceive this

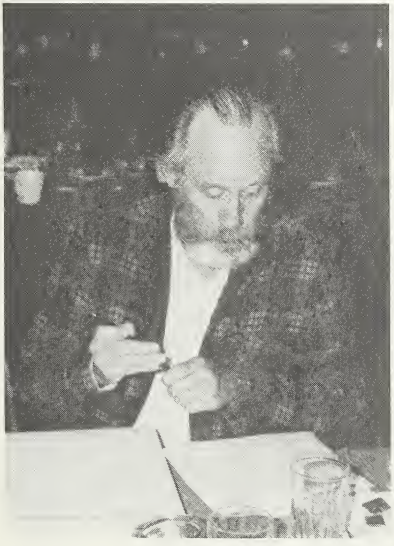
to be a function of the chapters. Some chapters do have effective programs dealing with different levels of identification, and "how-to" sessions on feeders, nest boxes, and landscaping. I think it is important to recognize and serve the needs of new members and less experienced members. Only through the attraction of new members who become long-term members will TOS be able to continue to function. TOS has made many contributions to ornithology in the last 25 years. I urge each member to be an active participant in TOS activities so that the next 25 years will be equally productive.

Jackson Chapter, TOS, August, 1990.

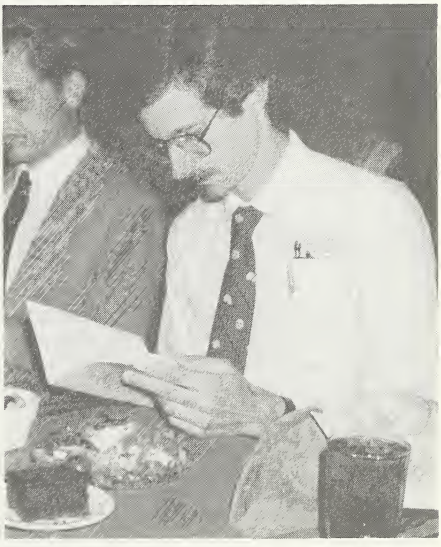
Chattanooga Chapter Field Trip.

TOS 75th Annual Meeting
May 5, 1990

Audrey Hoff, Lil Dubke, Ron Hoff



Jeff Wilson



Charles Nicholson

Barbara Finney and Ron Hoff

Bob Hatcher

Head Table at 75th Anniversary Meeting

Bob Ford and David Vogt

The Migrant, 61(4):125-128, 1990.

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INSTRUCTIONS TO AUTHORS

The Migrant records observations and studies of birds in Tennessee and adjacent areas. Most articles are written by members of the Tennessee Ornithological Society.

SUBMISSIONS: The original and, if feasible, two copies of the manuscript should be sent to the Editor: T. David Pitts, Biology Department, University of Tennessee at Martin, Martin, TN 38238. Manuscripts that have been published in other journals should not be submitted.

MATERIAL: The subject matter should relate to some phase of Tennessee ornithology. It should be original, factual, concise, and scientifically accurate.

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IDENTIFICATION: Manuscripts including reports of rare or unusual species or of species at atypical times will be reviewed by the TOS Certification Committee before publication in *The Migrant*. Verifying evidence should include: date, time, light and weather conditions, exact location, habitat, optical equipment, distance, behavior of bird, comparison with other similar species, characteristic markings, experience of observer, other observers verifying the identification, and reference works consulted.

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